

EAST KESTEVEN RURAL DISTRICT COUNCIL





Mach

ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH

AND

CHIEF PUBLIC HEALTH INSPECTOR FOR THE YEAR 1964

M. A. LORAINE, B.Sc., M.B., CH.B., D.P.H., D.C.H., Medical Officer of Health.

J. A. F. Saville, M.A.P.H.I., M.R.I.P.H.H., M.I.S.A.A., Chief Public Health Inspector.



MEMBERS OF THE COUNCIL - 1964/65

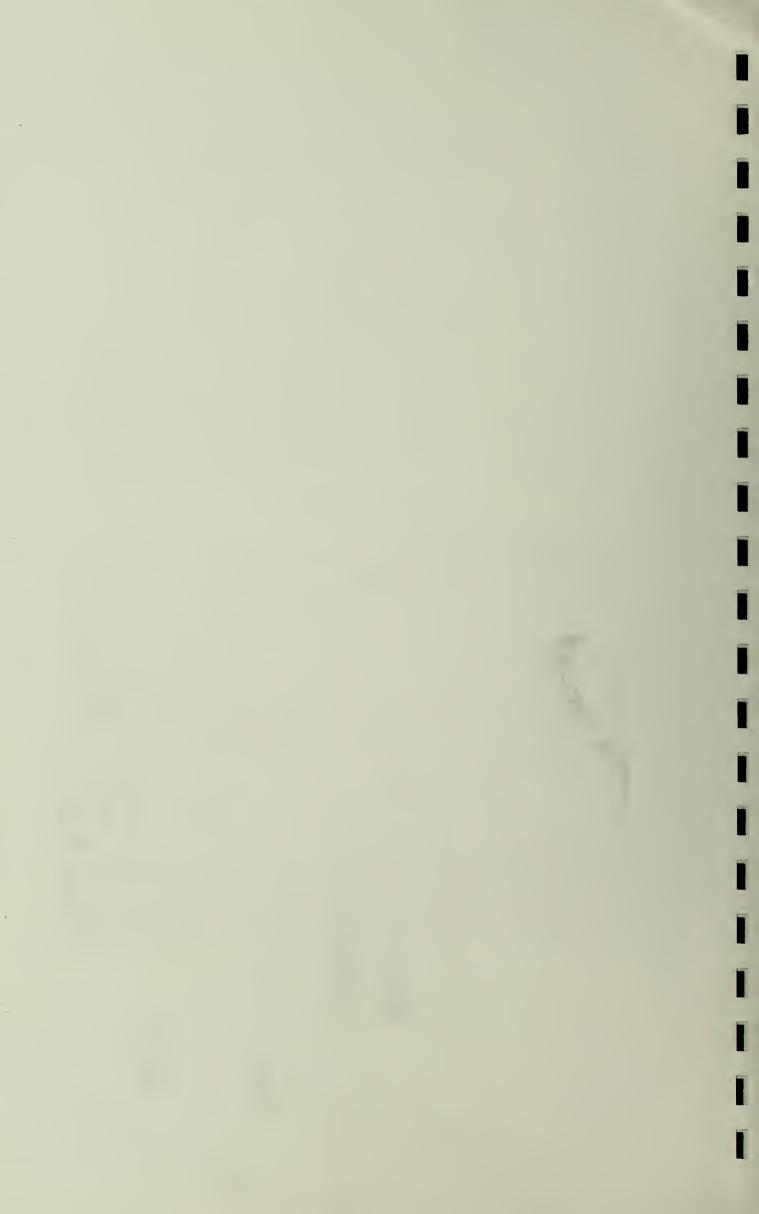
Mrs. M.Bangay Miss M.E.Brooks Mrs.E.M.Christian Mrs.E.G.Hatcliffe Mrs.Y.M.Jackson Mrs.N.Robson Mrs.K.M.Smith Mr.A.Baumber Mr.H.Barker Mr.C.R.T.Bell Mr.H.J.Birkett Mr.E.Blount Dr.T.K.Brandreth Mr.J.H.Brighton Rev. F. H. Chalk Rev. C. Clarke

Mr.R.Couling
Mr.J.T.Creasey
Mr.T.Curtis
Mr.R.O.Davies
Mr.J.W.Dixon
Mr.T.Fairchild
Mr.K.T.Godson
Mr.G.S.Grantham
Mr.T.H.Hall
Mr.T.W.F.Hall
Mr.J.T.Harrod
Mr.A.L.Jones
Mr.E.M.Key
Mr.J.E.P.Knight
Mr.A.W.Ladbrook

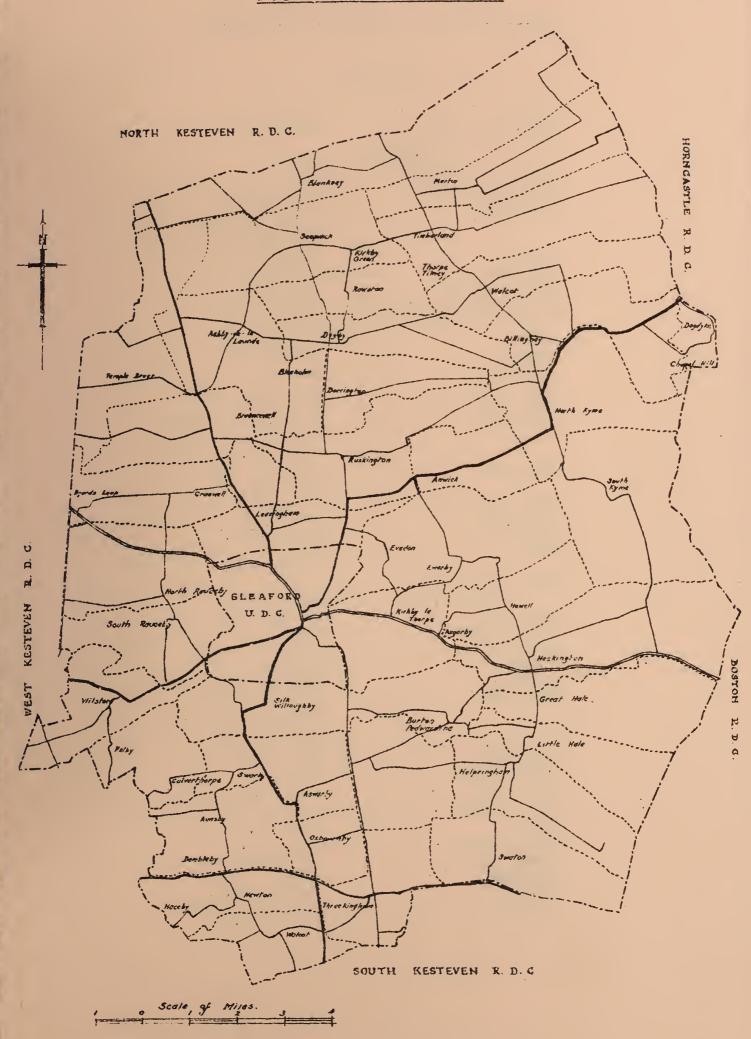
Mr.F.Lamyman Mr.S.F.Lamyman Mr.A.Leggate Mr.C. Maplethorpe Mr.A.Moor Mr.T.G.Muhl Mr.E.A.Robertson Mr.G.Sardeson Mr.J.E.Severs Mr.C.H.Smith Mr.W.J.Snowden Mr.W.Tomlinson Mr.W.L.A.Widdowson Mr.S.T.Wood Mr.G.C.Wright Mr.L.W.G.Willis



The Council Offices, Boston Road, Sleaford.



EAST KESTEVEN RURAL DISTRICT COUNCIL. ADMINISTRATIVE AREA.



LIST OF COUNCILLORS AND PARISHES REPRESENTED.

1964/1965.

ANWICK.
ASGARBY AND HOWELL.
ASHBY DE LA LAUNDE AND
BLOXHOLM.
ASWARBY AND SWARBY.
AUNSBY AND DEMBLEBY.
BILLINGHAY.

BLANKNEY.
BRAUNCEWELL.
BURTON PEDWARDINE.
CRANWELL AND BYARD'S LEAP.
CULVERTHORPE AND KELBY.
DIGBY.
DOGDYKE.
DORRINGTON.
EWERBY AND EVEDON.
GREAT HALE.
HECKINGTON.

HELPRINGHAM.

KIRKBY LA THORPE. LEASINGHAM. LITTLE HALE. MARTIN.

NEWTON AND HACEBY and WALCOT (F).

NORTH KYME.

NORTH RAUCEBY.

OSBOURNBY.

ROWSTON.

ROXHOLM.

RUSKINGTON.

SCOPWICK.
SCREDINGTON.
SILK WILLOUGHBY.
SOUTH KYME.
SOUTH RAUCEBY.
SWATON.
TEMPLE BRUER.
THREEKINGHAM.
TIMBERLAND.
WALCOT (B).
WILSFORD.

Lamyman, F. Sardeson, G.

Clarke, C. Barker, H. Fairchild, T. Birkett, H.J. Couling, R., J.P. Maplethorpe, C. Curtis, T. Willis, L.W.G. Key, E.M. Bangay, Mrs. M. Tickler, H.M. Snowden, W.J. Lamyman, S.F. Dixon, J.W. Chalk, Rev. F.H. Hall, T.H. Brandreth, Dr. T.K. Hatcliffe, Mrs. E.G. Muhl, T.G. Ladbrook, A.W. Widdowson, W.L.A. Godson, K.T. Jones, A.L. Severs, J.E. Leggate, A. Wright, G.C.

Knight, J.E.P. Harrod, J.T. Brighton, J.H., J.P. Robson, Mrs. N. Moor, A. Robertson, E.A. Hall, T.W.F. Jackson, Mrs. Y.M. Tomlinson, W. Baumber, A. Bell, C.R.T. Blount, E. Wood, S.T. Christian, Mrs. E.M., J.P. Smith, C.H. Davies, R.O. Smith, Mrs. K.M. Creasey, J.T. Grantham, G.S. Brooks, Miss M.E.

Members of the Health and Housing Committee.

1964 - 65.

Chairman:-

A.W. Ladbrook.

Vice-Chairman:-

Dr. T.K. Brandreth.

Members:-

Bangay, Mrs. M.

Baumber, A.

Birkett, H.J.

Blount, E.

Couling, R.

Hatcliffe, Mrs. E.G.

Harrod, J.T.

Jackson, Mrs. Y.M.

Jones, A.L.

Lamyman, S.F.

Leggate, A.

Muhl, T.G.

Robson, Mrs. N.

Smith, Mrs. K.M.

Snowden, W.J.

Willis, L.W.G.

Ex - Officio:-

Godson, K.T.

Tomlinson, W.

Clerk of the Council - A.P. Hazelton, Esq.

Chairman of the Council - John H. Brighton, Esq., J.P.

STAFF OF HEALTH DEPARTMENT.

Medical Officer of Health.

EDWIN I. BLENKINSOP. (Resigned 31-8-64).

MARGARET A. LORAINE. (Appointed 1-10-64).

Chief Public Health Inspector.

JOHN A. F. SAVILLE.

Additional Public Health Inspectors.

CLIFFORD RHODES.

JOHN WOOD.

Clerk/Typist.

MISS GILLIAN PATTISON.

Clerk.

MISS STELLA BUTLER.

Rodent Operators.

G. A. ROWLAND.

W. J. BULL.

STATISTICS AND SOCIAL CONDITIONS.

Area of Administrative District	123,406 acres.
Population (Registrar General's figure 1964 Estimated Mid Year Home Population.)	21,590
Population (Census 1931).	18,858
Population (Census 1951).	21,825
Population (Census 1961).	19,382
Number of inhabited dwellings as at 31-12-64.	5 ,7 52
Total Number of dwellings as at 31-12-64.	6,064
Number of inhabited dwellings (Census 1931).	4,348
Number of inhabited dwellings (Census 1951).	5,146
Number of inhabited dwellings (Census 1961).	5,946
Rateable Value (31st March, 1964).	£466,252
Sum represented by 1d. Rate (1963/1964).	£1,847-18-9d.

The Rural District of East Kesteven comprises 41 civil parishes and extends to 123,406 acres (193 square miles) from the now reclaimed and fertile fenlands to the fringe of the limestone hills of the Midland Shires. Situated in the Kesteven Division of Lincolnshire it is bounded on the east by the River Witham and the great Forty Foot Drain. On the south the District limit is defined for some distance by the main road from Grantham to the East Coast. It passes across this towards Folkingham, on the trunk road from Lincoln to London, and then takes a northwesterly course to Ermine Street at Wilsford Heath. This long straight road is followed northwards past Byard's Leap to Temple Bruer, where the boundary turns eastwards again, crossing the Lincoln road at Blankney Heath and thence past Metheringham Station and along the line of Metheringham Delph, back to the River Witham.

The inhabitants of the district generally, are engaged in agriculture. In addition, there are to be found a few minor miscellaneous trades and industries and large R.A.F. establishments at Cranwell and Digby, together with a sprinkling of light industry, poultry packing, prepared meat products, etc., and light engineering, etc.

EAST KESTEVEN RURAL DISTRICT COUNCIL.

	: 10001	Iome Popul	ation.	Estimated	Λ	No. of	Total	
PARISH.	Census 1931	Census 1951	Census 1961	October 1964.	Area in Acres	Occupied Houses.	Nc. of Houses.	
ANWICK	235	214	218	245	2,016	95	97	
ASGARBY & HOWELL ASHBY & BLOXHOLME	164 286	122	114 609	128	2,310	30	32	
ASWARBY & SWARBY	200	357 188	163	685 183	4,104 2,648	88 57	92 58	
AUNSBY & DEMBLEBY	188	137	160	180	2,944	52	54	
BILLINGHAY	1,222	1,561	1,634		3,671	575	591	
BLANKNEY	546	587	424		6,781	1 40	123	
BRAUNCEWELL	119	102	232	261	2,682	17	25	
BURTON PEDWARDINE	161	164	127	143	1,898	35	42	
CRANWELL & BYARDS	F0.3	20.4	1 (7)	4 004	0 500	100	422	
LEAP CULVERTHORPE AND	503	384	1,673	1,881	2,793	126	133	
KELBY	133	113	106	119	1,953	30	32	
DIGBY	396	467	426	479	2,494	142	145	
DOGDYKE	255	247	248	279	730	63	68	
DORRINGTON	368	336	408	459	1,978	1 28	134	
EVERBY AND EVEDON	394	366	308	346	4,886	103	114	
GREAT HALE	657	586	554	623	3,701	184	187	
HECKINGTON	1,636	1,723	1,691	1,901	5, 302	601	615	
HELPRINGHAM KIRKBY LA THORPE	737	704	671	754 312	3,410 2,577	248 93	257 96	
LEASINGHAM	367	465	514	578	2,082	224	228	
LITTLE HALE	223	221	176	198	2,488	60	63	
MARTIN	672	1,063	760	854	3,777	235	245	
NEWTON & HACEBY	180	143	134	151	2,067	39	47	
NORTH KYME	594	564	555	624	3,893	182	190	
NORTH RAUCEBY	228	198	183	206	3,211	55	60	
DSBOURNBY ROWSTON	327 187	359 160	348	391 225	1,476 1,879	1 2 0 51	123 54	
ROXHOLM	119	118	69	77	935	18	20	
RUSKINGTON	1,246	1,764	2,462	2,570	3,957	921	929	
SCOPWICK	413	425	783	880	3,983	140	153	
SCREDINGTON	296	259	230	259	2,634	86	87	
SILK WILLOUGHBY	181	180	173	194	2,590	62	63	
SOUTH KYME	397	390	420	472	4,930	119	123	
SOUTH RAUCEBY SWATON	258 232	281 265	261 242	293 272	2,581 3,274	93 71	99 72	
TEMPLE BRUER ETC.	158	137	144	162	3,785	38	42	
_HREEKINGHAM	218	264	186	209	2,581	56	59	
TIMBERLAND	618	527	514	578	4,689	164	171	
WALCOT "B"	469	499	470	528	3,339	163	165	
WALCOT "F"	115	.95	84	94	1,773	21	23	
WILSFORD	452	396	430	483	2,604	147	153	
MOTALS.	16,357	17,412	21,825	21,590	123,406	5,752	6,064	

Density approximately .18 persons per acre.

Public Health Department, The Hoplands, Boston Road, SLEAFORD, Lincs. September, 1965. Mr. Chairman, Ladies and Gentlemen, I have pleasure in presenting my first Annual Report. In October, 1964, I became your Medical Officer and I wish to take this opportunity of thanking the Chairman and the Members of the Council for all their help. I have been most grateful for all the assistance I have received from Mr. Saville and the Health Department Staff as well as from everyone in the new Council Offices. A picture of the new Council Offices takes pride of place on the front of this report. The opening of these Offices was the most memorable event in the year. The health of the district has been very good. The only prevalent infectious disease was measles with 393 notifications but no denths. It will be interesting to see if mensles vaccination will reduce the number of cases permanently or if after an initial enthusiastic response there will be apathy. In England and Wales only 69% under 5 years of age are protected against diphtheria and 65% against poliomyelitis. This shows that there can be no relaxation by workers in this field if deaths are to be prevented from these diseases. Great interest has been shown during the past year in the effects of hypothermia. It is now accepted that cold can cause irreversible changes in the very young and the elderly. The needs of the elderly have been recognised in East Kesteven and for those who need a little help flatlets with a Warden have been provided, nine at Ruskington and ten at Billinghay. I think it is ideal that the cost of the central heating is included in the rent and then there is no temptation to switch off or let the fire go out at night. Adequate heating with economy is a very difficult problem to solve but it must be solved for the senior citizens to have comfort and good health in their retirement, whilst retaining their independence. Mr. Saville and his Staff have worked hard to stimulate food handlers in the district and have achieved increasing standards. Here again constant vigilance is necessary for the benefits of the consumer, as was shown by the outbreak of Typhoid Fever at Aberdeen. M. A. Loraine. Medical Officer of Health. -6-

NOTE: Population.

The Registrar General's estimate of the home population for the mid-year, 21,590 shows a substantial increase of 580 above the figure for the previous year which was 21,010. The natural increase of births over deaths accounted for some 240 of this increase. The remainder, therefore, are due to an influx of migrants probably service personnel.

Birth and Death Rates.

As the age and sex distribution of the population in different areas materially affects both the Birth and Death Rates of those areas, comparability factors allowing for this are issued by the Registrar General for each Local Government Unit. These factors may be used for calculating what are termed in this Report as "Nett" rates and fairer comparisons are obtained if the latter are used when comparing rates with those of any other area (when these have been similarly adjusted) or with the rates for the Country as a whole. In addition to the adjustment made to the death rate area comparability factor, the birth rate area comparability factor has also been adjusted to take account of the presence of sterile population in institutions or mentally deficient.

These factors for Births and Deaths in respect of East Kesteven are 1.04 and 1.16 respectively. The corresponding figure when multiplied by the Crude Rate (that is, for Births and Deaths as the case may be) will give the "Nett" Rate.

Live Births.

	Males.	Females.	Total.
Total.	224	199	423
Legitimate.	215	195	410
Illegitimate.	9	4	13

Crude Live Birth Rate per 1,000 estimated population. - 19.59
Nett Live Birth Rate per 1,000 estimated population. - 20.37
Rate for England and Wales. 18.4
Illegitimate live births 3.07 per cent of total live births.

Stillbirths.

	Males.	Females.	Total.
Total.	1	3	4
Legitimate.	1	2	3
Illegitimate.	_	1	1

Stillbirth Rate per 1,000 (Total live and still) births. - 9.37 Rate for England and Wales. 16.3

Total Live and Still Births.

	Males.	Females.	Total.
Total.	2 2 5	202	427
Legitimate.	216	197	413
Illegitimate.	9	5	14

Deaths.

Males.	Females.	Total.
99	84	183

Crude Death Rate per 1,000 estimated population. - 8.48
Nett Death Rate per 1,000 estimated population. - 9.83
Rate for England and Wales. - 11.3

Maternal Mortality (i.e. Deaths due to Pregnancy, childbirth or abortion).

No. of Deaths.	Nil.
Rate per 1,000 total births (i.e. live and still)	0.00
Rate for England and Wales.	0.25
There were no deaths due to pregnancy, childbirth	
or abortion during the year.	

Infant Mortality. (i.e. Deaths of Infants under one year

		0	inge).
	Males.	Females.	Total.
No. of deaths. Legitimate. Illegitimate.	6 5 1	2 2 	8 7 1
All Infants.		<u>East</u> <u>Kesteven</u>	England & Wales
Rate per 1,000 live births	. u	18.91	20.0
Legitimate Infants.		Erst Kesteven	England & Wales
Rate per 1,000 legitimate live births.		17.07	-
Illegitimate Infants.			
Rate per 1,000 illegitimet live births.	е	76.92	-
Of the total infant d c'ildren under four weeks		*	

Neonatal Mortality Rate per 1,000 related births		11.82
The number of deaths occurring in infants under 4 weeks of age being	600	5
Early Neonatal Mortality Rate (1st week)		
Per 1,000 related live births		4.72
The number of deaths occurring in infants under 7 days of age being	••	2 .
Perinatal Mortality Rate (stillbirths + de-		

- 14.05

Per 1,000 total live and atillbirths

Births.

The live birth rate of 19.59 per thousand of the estimated population was higher by 0.60 than that of the previous year and the highest recorded in the district since 1949. The number of live births belonging to the district being 423 (224 males 199 females) compared with 399 (188 males 211 females) in 1963. The 4 illegitimate live lirths representing 3.07 per cent of the total showed a decrease on the figures for the previous year when there were 20 such births representing 5.01 per cent.

The number of Stillbirths (4) was also lower than last year and the stillbirth rate (9.37) was lover than the average for 13 years. The number of births for the year exceeded the number of deaths by 240.

The following table gives comparative statistics relating to Births in the East Kesteven Rural District since 1946.

	L	IVE BIRTHS			ST	STILLBIRTHS			
Year	Legit- imate.	Illegit- imate.	Total	Rate per 1,000 Population.	No.	Rate per 1,000 Total Births.			
1946	-	_	355	22.05	eco.	_			
1947	367	20	387	23.5	12	30.07			
1948	347	19	366	20.22	13	37.07			
1949	343	8	351	20.00	6	16.81			
1950	316	16	332	15.46	9	26.39			
1951	354	10	364	16.38	1	2.74			
1952	336	11	347	14.80	7	19.77			
1953	331	15	346	16.74	6	19.89			
1954	325	13	338	17.01	7	20.29			
1955	301	12	313	15.45	7	21.87			
1956	361	10	371	18.14	9	23.68			
1957	336	8	344	16.44	6	17.14			
1958	324	14	338	16.28	8	23.12			
1959	307	13	320	15.19	5	15.38			
1960	348	6	354	16.60	6	16.66			
1961	345	11	356	17.36	7	19.29			
1962	345	9	354	16.84	8	22.1			
1963	379	20	399	18.99	6	14.81			
1964	410	13	423	19.59	4	9•37			

Civilian population used as basis of calculating rates up to 1949. Since 1949 the total population figures have been used.

Comparative Table 1.

Vital Statistics - 1946 - 1964.

	England & Wales	11.5	12.0	10.8	11.7	11.6	. 12.5	11.3	12.2	11.3	11.7	11.7	11.5	11.7	11.6	11.5	12.00	11.3	12.2	11.3
Death Rate (Crude)	Kesteven County	11.95	11.87	11.04	11.77	11.20	10.78	9.84	11.56	11.95	12.36	12.35	10.84	11.56	11.28	11.53	11.32	11.68	11.81	11.10
Deat	East Kesteven	11.18	11.3	9.71	10.65	.11.22	8.73	7.85	8.32	.10.12	8.64	. 9.24	8.37	9.20	9.56	8.20	8.93	9.13	9.71	8.48
	England & Wales	19.1	20.5	17.9	16.7	15.8	15.5	15.3	17.0	15.2	15.0	15.7	16.1	16.4	16.5	17.1	17.4	18.00	18.02	18.4
Birth Rate (Crude)	Kesteven County	20.06	21.37	19.20	18.45	16.78	16.36	15.56	16.16	16.16	15.70	16.12	16.05	16.39	16.64	17.35	16.81	17.80	18.64	17.95
Birt	Eas t Kesteven	. 22.05	. 23.5	20.22	20.00	15.46	16.38	14.80	16.74	17.01	15.45	18.14	16.44	16.28	15.19	16.60	17.36	16.84	18.99	19.59
Rate	England & Wales	43.00	41.00	34.00	32.00	30.00	30.00	27.6	26.8	25.5	24.9	23.8	23.00	22.5	22.0	21.7	21.4	21.4	20.9	20.0
Infantile Mortality Rate	Kesteven County	39.65	33.31	30.46	37.20	41.30	28.09	35.32	36.80	24.32	25.97	28.19	20.55	20.56	17.12	20.46	18.99	20.02	17.44	21.28
Infant	East Kesteven	36.62	43.9	40.98	34.18	36.14	24.16	43.23	31.79	11.8	25.56	18.87	.26.16	.26.63	. 25.00	16.95	25.28	31.07	15.04	18.91
	YEAR.	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964

Comparative Table 11 - Vital Statistics - 1946 - 1964.

Nett Death Rate.	1	1	ı	1	1	09.6	8.63	9.15	11.03	10.28	11.83	10.80	11.86	11.85	10.49	11.43	11.59	11.25	9.83
Crude Death Rate.	11.18	11.3	9.71	10.65	11.22	8.73	7.85	8.32	10.12	8.64	9.24	8.37	9.20	9.26	8.20	8.93	9.13	9.17	8.48
Deaths. Total	.180	186	171	.187	. 220	194	184	. 172	. 201	175	189	175	191	. 195	176	183	192	204	183
of De	80	, 06	92	78	111	91	. 26	75	95	74	16	92	89	88	80	77	06	103	84
No.	100	96	95	109	109	103	87	97	109	101	92	66	102	107	96	106	102	101	66
Inf Mort. Rate.	36.6	43.9	40.98	34.18	36.14	24.16	43.23	31.79	11.8	25.56.	18.87	26.16	26.63	25.00	16.95	25.28	31.07	15.04	18.91
under of age. Total	-	17	, 15	12	72	8	15	-	4	Φ		6	6	Φ.	9	0	\	9	Φ.
Deaths u e year o M F	1	10	4	4	4	2	7	7		~	0	0	2	4	5	4	9	\sim	. 2
Dea one y M	1	7		Φ	Φ	5	Φ	4	\sim	9	2	7	7	4	-	5	5	3	9
of irths. Total	·	12	13	9	6	<u>.</u>	_	9	_	<u>.</u>	6	9	ω.	5	9		Φ	9	4
No. of Stillbirths M F Tota	1	4 8	. 5, 8	. 5 1	6 3	 - -	3 4	. 2 4	- 6	. 6	. 2 7	2 4	. 3 5	2 3	4 2	3 4	6 2	2 . 4	1 0
Nett. Birth Rate.	ı	ı	1	ı	i	19.17	17.31	19.59	17.69	17.61	10.68	18.58	18.40	17.17	18.95	19.61	19.02	19.75	20.37
Crude Birth Rate.	22.05	23.5	20.22	20.00	15.46	16.38	14.80	16.74	17.01	15.45	18.14	16.44	16.28	15.19	16.60	17.36	16.84	18.99	19.59
f ths. Total	355	387	366	351	332	364	347	346	338	313	371	344	338	320	354	356	354	399	423
No. of Live Births. W F Tota	190	183	174	171	151	166	169	158	169	149	186	164	158	145	185	170	1.74	211	199
N Live M	165-190	204	192-174	180	181	198	178	188	169-169	164.149	185.	180	180	175	169	186	180	188	224
Population Mid Year R.G. Istimate.	16,100	, 16,400	17,610 *	17,550	21,470	22,210	23,450	20,670	19,870	20,260	20,450	20,920	20,750	21,060	21,330	21,020	21,020	21,010	21,590
YEAR	1946	1947	1948	1949	1950	1951	.1952	1953	1954	1955	1956	.1957	.1958	1959	1960	1961	1962	1963	1964

Civilian population figures were therefore used for calculating the Death Rates. These deaths have, however, been included in the 1950/64 returns and the total population figures have therefore been used in determining For the years 1938/49 deaths of non-civilians were excluded from the Registrar General's returns and the Rates for thrse years.

Deaths.

Details of deaths now supplied by the Registrar General are classified under the 36 headings based on the Abbreviated List of the International Statistical Classification of Diseases, Injuries and Causes of Death, 1948.

Chief Causes of Death.

The following is a statement of the Chief causes of deaths occurring in the East Kesteven Rural District in 1964.

Cause of Derths.	No. of Deaths	Rate per 1,000 est. population.
Vascular lesions of		
nervous system.	28	1.296
Coronary Disease, Angina.	28	1.296
Hypertension with heart disease.	3	0.138
Other heart diseases.	17	0.782
Other circulatory diseases.	22	1.020
Malignant and lymphatic		
neoplasms.	34	1.57

The crude death rate from all causes was 8.48 per 1,000 of the estimated population, compared with last year's figure of 9.71, while the Nett Rate was 9.83 compared with 11.25 for the previous year. The number of deaths which now include those members of the Services stationed in the area showed a decrease in the death rate of 1.23 compared with the previous year and was the lowest since 1960.

Diseases of the Cardio-vascular system again head the list in the causes of death, accounting for just over half the total (98) and of these 28 were due to Coronary Disease.

34 deaths were due to malignant neoplasms or new growths which are as is not unusual the second highest cause of death, followed by the respiratory group with 14 deaths, 12 of which were due to Pneumonia and Bronchitis.

There were 8 deaths of infants under one year of age representing an Infant Mortality Rate of 18.91 per 1,000 live births compared with 6 deaths in 1963 representing a rate of 15.04 per 1,000 live births. The small numbers involved mean that one or two deaths can make a big difference in the rate per thousand live births.

There were fortunately no deaths in the East Kesteven Rural District from Maternal Causes, representing a Maternal Mortality Rate of 0.00 per 1,000 total births, compared with a National Rate of 0.25. When comparing such rates with other areas or previous years no importance should be attached to rates based on very small numbers as they may have little or no statistical significance.

There were no deaths from Respiratory Tuberculosis during 1964.

The Deaths registered under Heart Disease during 1964 numbered 48. Reference to the Chief Causes of Death shows that this remains the principal cause. The death rate per 1,000 of the estimated population was 2.22 compared with 3.23 for 1963.

The following is a statement of fatalities from Heart Disease during the years 1946 - 1964.

Year	No. of Deaths II F Total		hs	Crude Death Rate per 1,000 of population.	to total Deat's from all causes	Percentage to total Deaths from all causes Kesteven County.
1946	33	26	59	3.04	32.8	25.8
1947	25	18	43	2.62	23.1	28.5
1948	33	23	56	3.18	32.75	29.3
1949	34	25	59	3.36	32.08	30.9
1950	32	40	72	3.45	32.73	31.0
1951	30	32	62	2.79	31.95	33.9
1952	27	23	50	2.13	27.17	31,9
1953	26	20	46	2.22	26.74	33.2
1954	33	32	65	3.14	32.50	38.2
1955	39	26	65	3.21	37.14	35.7
1956	28	31	59	2.88	31,21	38.1
1957	40	16	56	2.68	32.00	36.8
1958	22	29	51	2.46	26.73	34.8
1959	43	24	67	3.18	34.36	34.1
1960	41	28	69	3.28	39.20	36.2
1961	34	25	59	2.32	32.24	33.3
1962	29	28	57	2.23	29.69	34.5
1963	39	29	68	3.23	33.33	32.8
1964	30	18	48	2.22	26.23	33.6

NUMBER AND CAUSES OF DEATHS DURING 1964.

	Males.	Females.	Total.	% to Total Deaths.	Crude Death Rate.
Tuberculosis, respiratory.	_	_	_	-	-
Tuberculosis, other.	_	-	-	-	
Syphilitic disease.	_	-	-	<u>-</u>	- !
Diphtheria.	<u>-</u>	_	-	_	-
Whooping Cough.	_	-	_	_	- !
Meningococcal infections.	<u> </u>	_	-	-	-
Acute poliomyelitis.	_	. –	_	-	- !
Measles.	-	_	_	-	;
Other infective and parasitic diseases.	-	·-	-	_	
Malignant neoplasm, stomach.	4	3	7	3.82	0.324
Malignant neoplasm, lung, bronchus.	7	-	7	3.82	0.324
Malignant neoplasm, breast.	-	1	1	0.546	0.046
Malignant neoplasm, uterus.	-	2	2	1.092	0.092
Other malignant and lymphatic neoplasms.	10	7	17	9.282	0.782
Leukaemia, aleukaemia.	1	1	2	1.092	0.092
Diabetes.	1		1	0.546	0.046
Vascular lesions of nervous system.	9	19	28	15.28	1.296
Coronary disease, angina.	17	11	28	15.28	1.296
Hypertension with heart disease.	2	1	3	1.638	0.138
Other heart diseases.	11	6	17	9.282	0.782
Other circulatory diseases.	7	15	22	12.012	1.020
Influenza.	_	-	-	_	
Pneumonia.	.4	4	8	4.368	0.368
Bronchitis.	3	1 1	4	2.184	0.184
Other disease of respiratory system.	2	_	2	1.092	0.092
Ulcer of stomach and duodenum.	- `	_	-	-	
Gastritis, enteritis and diarrhoea.	1	1	2	1.092	0.092
Nephritis and nephrosis.	-	1	1	0.546	0.046
Hyperplasia of prostate.	-	-	-	-	- :
Pregnancy, childbirth, abortion.	-	- .	_	_	
Congenital malformations.	3	-	3	1.638	0.138
Other defined and ill-defined diseases.	9	. 9	18	9.828	0.828
Motor vehicle accidents.	6		6	3.276	0.276
All other accidents.	1	1	2	1.092	0.092
Suicide.	1	1	2	1.092	0.092
Homicide and operations of war.	-	-	-	-	-
All causes.	99	84	183	100%	8.84

Causes of Death at Different Periods of Life - 1964.

	Cause of Death.	Total	Sex	0	1	5	15	25	45	65	75
1.	Tuberculosis, Respiratory.	!	M & F								
	Tuberculosis, Other.	ļ <u> </u>	M & F						_	_ [
	Syphilitic Disease.	_	M & F	_	_	_					
	Diphtheria.	_	M & F	_	_	_	_	_	_	_ /	_ "
	Whooping Cough.	-	M & F		_ 1	_	_	-1	_	_	_
	Meningococcal Infections.	_	M & F	_	_	_	_	_	_		- 14
7.	Acute Poliomyelitis.	-	M & F	l - :	_	_	-	_	_	_	_
	Measles.	- ()	M & F	_	-	-	- 1	- :	-1	-	-
9.	Other Infective and Parasitic	1									
	Diseases.	_	M & F	! - :	- 1	-	-	-	-	-	-
10.	Malignant Neoplasm, Stomach.	4	M	-:	-]	-	1,-1	- 1	2	1	1
4.4		3	F	i - '	- 1	-	- 1	- 1	-	-	3
	Malignant Neoplasm, Lung, Bronchus.	7	M	-	- 1	-	-	-	3	. 2	2
	Malignant Neoplasm, Breast.	1	F	0 = 1	- (-	- 1	-	1	-	- 2
	Malignant Neoplasm, Uterus.	2	F	- :		-	-	-	2	-	- ,
14•	Other Malignant and Lymphatic Neoplasms.	10	יו איז					4	4	,	2
	* Neopiasms.	7	$\cdot rac{ ext{M}}{ ext{F}}$	-			-	1	4	3	2
15	Leukaemia, Aleukaemia.	1	M	-		-				3	1
1)•	Deuraenta, Aleuraenta.	1	F		1						
16.	Diabetes.	1	M	. 🗓					1		- 1
	Vascular Lesions of Nervous		747								
	System.	9	M	1_,	_			_	1	4	4
		19	F	_			_			7	12
18.	Corenary Disease, Angina.	17	M	_	_	_	- /	_ [4	. 7	6
		11	F	- 1	_	_	-	-	1	3	7
19.	Hypertension with Heart Disease.	2	·M	1 -	-	_	- '	_	_	1	1
		1	F			-	-	-	1	_	-
20.	Other Heart Disease.	11	Μ.	1-1	-	-	-	-	-	3	8
		6	F	i - i	-	-	- 1	-	_	-	6
21.	Other Circulatory Disease.	7	M	-	-	-	-	-	-	-	7
		15	F	- 1		-	-	-	- 1	4	11
	Influenza.	-	M & F	-	-	-	-1	-	-	-	- 1
23.	Pneumonia.	4	, M	-!	-	-	-	-	-	3	1
24	Proposition	4	F	2:		-		-		_	2
24 •	Bronchitis.	3	М я	- 1		-1			1	3	-
25	Other diseases of the Respiratory		· L	- 1	-		-		1	_	-
۷٠.	System.	2	· M	: _ i		_		1			1
26.	Ulcer of Stomach and Duodenum.		M & F	1. []							_
	Gastritis, Enteritis and Diarrhoea.	1	M	-	_	_	_	_	_	1	_
	,	1	F	-	_	-	_	_	_	_	1
28.	Nephritis and Nephrosis.	1	F	-	-	-	-	-	-	1	-
29.	Hyperplasia of the Prostate.	-	M & F	-	-	_	_	_	-	-	-
	Pregnancy, Childbirth, Abortion.	- 1	F	-	-	-	-	-	-	-	, -
31.	Congenital Malformations.	: 3	M ·	2	-	-	-	-	-	-	1
32.	Other defined and ill-defined										
	diseases.	9	M	3	-	-	-	1	-	1	4
2.2	76.	9.	F	-	- 1	-	-	-	2	2	5
	Motor vehicle accidents.	6	M	1	-		3	3	-	-	-
34•	All other accidents.	1 1	M F		-	-		-		1	-
25	Suicido	1	M H	- 1	-	-	-	1	-		-
35•	Suicide.	1	F IVI	-	-	-			_	- 1	
36.	Homicide and Operations of War.		M & F					_		_	
		4	,				<u> </u>				
	Totals - All Causes.	183	M & F	8	1		3	8	24	51	88

	JANUARY.	FEBRUARY. MARCH.	APRIL.	MAY.	JULY.	AUGUST. SEPTEMBER. OCTOBER.	NOVEMBER.	TOTALS.
PARISH.	M F	MFMF	M F	MF	MFMF	MFMFMF	M F M	F M F:
ANWICK. ASGARBY & HOWELL. ASHBY & BLOXHOLME. ASWARBY & SWARBY. AUNSBY & DEMBLEBY. BILLINGHAY. BLANKNEY. BRANNCEWELL. BURTON PEDWARDINE. CRANWELL & BYARDS LEAP. CULVERTHORPE & KELBY. DIGBY. DOGDYKE. DORRINGTON. EWERBY & EVEDON. GREAT HALE. HECKINGTON. HELPRINGHAM. KIRKBY LA THORPE. LEASINGHAM. LITTLE HALE. MARTIN. NEWTON & HACEBY. NORTH KYME. NORTH RAUCEBY. OSBOURNBY. ROWSTON. ROXHOLM. RUSKINGTON. SCOPWICK. SCREDINGTON. SILK WILLOUGHBY. SOUTH KYME. SOUTH KYME. SOUTH RAUCEBY. SWATON. TEMPLE BRUER ETC. THREEKINGHAM. TIMBERLAND. WALCOT B. WALCOT F. WILSFORD.		1			- 1	1	- 1	- 1 2 - 1 - 8 1 - 1 - 1 1 8 3 - 1 - 1 1 8 3 - 1 - 1 1 1 3 - 1 - 1 1 1 3 - 1 1 1 1
TOTALS.	20	19 15	4 12			10 5 7 5 7 8		3 99 84

Average Age at Death during 1964.

Ignoring deaths of Infants under one year of age, the average age of persons dying in East Kesteven during 1964, was:-

68.45 Males

Females

In 1912 it was 55 for a A century ago the expectation of life in Britain was no more than 40 years. In 1912 it was 55 for and 52 fcr males. In 1939 it was just over 64 and 60. Today the figures have risen to 73.9 for female and 52 fcr males. females and 68 for males.

The following statistical tables may be of some interest in regard to births, deaths, etc.

Infant Deaths from Stated Causes 1964.

					-		
Cause of Death.	Under one day	1 - 7 days.	1 - 4 weeks	Total under 4 weeks	1 - 3 menths	3 - 12 months	Total under 1 year
Broncho Pneumonia	-	ı	_	-	ı	Υ	-
Congenital Hydrocephalus.	1	-	~	-	•	- # "	-
Prematurity.		1	τ-	2	-		2
Congenital Heart Disease.,	 I	1	₹	τ-	ı	·	Υ-
Asphyxia (inhaled vomit - Foetal).	_	ı'	1		*	or man — No. S™T ¶ o	2
Septicaemia.	I		l	1	I	۲-	-
TOTALS.	2	_	3	5	-	5	Φ

APPENDIX B

Abridged life table, 1961-1963 (home population)

England and Wales

Ifal	.es	A	Fema	les	
lx	o _e x	Age	l _x	o e x	
10,000	68.0	0	10,000	73.9	
9,760	68.6	1	9,814	74.3	
9,744	67.7	2	9,801	73.3	
9,735	66.8	3	9,793	72.4	
9,728	65.9	4	9,787	71.5	
9,722	64.5	5	9,783	70.5	
9,699	60,0	10	9,767	65.6	
9,679	55.2	15	9,754	60.7	
9,635	50.4	20	9,736	55.8	
9,582	45.7	. 25	9,713	50.9	
9,534	40.9	30	9,684	46.1	
9,477	36.1	35	9,641	41.2	1
9,390	31.4	40	9,575	36.5	
9,249	26.9	45	9,472	31.9	
9,009	22.5	50	9,307	27.4	
8,599	18.5	55	9,061	23.1	
7,902	14.9	60	8,697	18.9	
6,833	11.8	65	8,121	15.1	
5,476	9.1	70	7,246	11.6	
3,857	6.9	75	5,926	8.7	
2,251	5.1	80	4,134	6.2	and the state of t
936	3.7	85	2,269	4.4	

This abridged life table is constructed from the estimated home population in 1961, 1962 and 1963 and the total deaths in those years.

The column hended lx shows, for each sex, the number who would survive to exact age x out of 10,000 born who were subject throughout their lives to the recorded age death rates of the period.

Column oex is the "expectation of life", that is, the average future lifetime which would be lived by persons aged exactly x, if likewise subject to those death rates.

Cancer Deaths - 1964.

(Taken from the return of Deaths to the Sanitary Authority).

Total	H H	1	t t	2 3	6 2	-	1 4	3 2	3 4	-	1	-	21 13
Other Sites	M	1	t	- f	-	1	1	2 -	-	-	1	1	7 4
Rectum	M F	1	1	1	1	1	1	←	1	1		1	3 1
Colon	E W	 1	1	1	l l		1	- T	1	1	1	1	- 2
Uterus	단	1	ı	2	ı		1	1	1	ı		1	2
Breast	단	1	1	1	-	- 1	1	1	·		1	1	√-
Lung Bronchus	M F	1	1	9	- - -	1	2 -	9	1	l I	1	 I	- 2
Stomach	M F	1	1		-	1	1	1	1 3	· · · · · · · · · · · · · · · · ·	1	. 1	4 3
Age Groups.		Under 30	30-40	40-50	20-60	60-65	65-70	70-75	75-80	80-85	85–90	Over 90	Totals.

Numbers and Causes of Deaths During the Years 1955 - 1964.

General Provision of Health Services.

The County Medical Officer of Health and his staff are responsible for the active operation of the Health Services under Part III of the National Health Service Act, 1946.

These include:-

Chre of Mothers and Young Children.
Midwifery.
Health Visiting.
Home Nursing.
Vaccination and Immunisation.
Ambulance Services.
Domestic Help.
Prevention of Illness, care and after care.
Health Education.
Mental Health.

In addition the County Medical Officer of Health is responsible for the School Medical Services set up under the provisions of the Education Acts and regulations made thereunder.

Nursing in the Home.

Under the County Council Scheme, District Nurses/Midwives/Health Visitors are stationed at villages throughout the area.

They are st tioned at:-

(a) District Nurse/Midwives.

BILLINGHAY. Mrs. M. Covell. 44, Walcot Road, Billinghay. Billinghay 387.

RUSKINGTON. Miss D. Isanc. 1, Queensway, Ruskington. Ruskington 245.

(b) District Nurse/Midwife/Health Visitors.

BLANKNEY. Miss C. Turner. Jubilee House, Metheringham.

Metheringham 231.

HECKINGTON. Miss M. M. Hill. 20, Burton Road, Heckington. Heckington 377.

HELPRINGHAM. Miss G. H. Moore. The Green, Helpringham. Swaton 255.

MARTIN. Mrs. M. O. Matthew. 16, East View, Walcot. Billinghay 326.

OSBOURNBY. Miss I. Stubley. North Street, Osbournby. Culverthorpe 263.

RAUCEBY. Mrs. I. Lusby. Woodland Cottage, South Rauceby. South Rauceby 221.

SCOPWICK. Mrs. I. G. Wray. North Street, Digby. Metheringham 224.

Hoalth Visitors.

The Health Visitor provides a medico-social service to the family and in particular to mothers and infants, the aged, the tuberculosis patient and the problem family.

Home Helps and Good Neighbour Service.

These are provided for the whole of the East Kesteven Area on application to the District Supervisor, Riversdale House Clinic, Westgate, Sleaford. A Good Neighbour and Night Sitter Service are run in conjunction with the Home Holp Service.

Hospital Services.

The hospitals administered by the Sheffield Regional Hospital Board serve the area - General Hospitals at Lincoln, Grantham and Boston. Maternity Units at Grantham, Lincoln and Sleaford. Infectious Diseases Hospitals at Lincoln and Bourne. St. Andrew's Old People's Home at Everby.

Infant Welfare Clinics.

These are scattered throughout the principal villages in the area and are as follows:-

CENTRE.	ADDRESS OF CENTRE.	DAYS OF OPENING.	TI:ES.
BILLINGHAY.	Church Hall, Billinghay.	2nd and 4th Wednesday.	2 - 4 p.n.
CRAN'ELL.	R.A.F. Station, Cranwell.	1st and 3rd Thursday.	2 - 4 p.n.
HECKINGTON.	Village Hall, Heckington.	3rd Thursday.	2 - 4 p.m.
HELPRINGHAM.	Memorial Hall, Helpringham.	1st Friday.	2 - 4 p.n.
LEASINGHAM.	Village Hall, Leasingham.	3rd Tuesday.	2 - 4 p.m.
MARTIN.	Dr. R.E. Riley's Surgery, Martin.	3rd Wednesd y.	2 - 4 p.m.
OSBOURNBY.	Village Hall, Osbournby.	Last Thursday.	2 - 4 p.m.
SOUTH KYME.	Village Hall, South Kyme.	4th Tuesday.	2 4 p.m.
SLEAFORD.	Riversdale House Clinic, Sleaford.	Every Monday.	2 - 4 p.m.

Welfare Foods.

Welfare foods are available from the above Welfare Centres on the days of opening and from Riversdale House, Westg.te, Sleaford, Mondays to Fridays, 8.45 a.m. to 5.15 p.m.

Venereal Disease.

Patients suffering from Venereal Diseases are sent by General Practitioners to treatment centres at Nottingham, Grantham, Lincoln and Peterborough. These are administered by the Sheffield and East Anglian Hospital Boards and there were no changes in the administration during the year.

Ambulance Service.

Administered by the Kosteven County Council with both imbulance and sitting car vehicles based in Sleaford. They are now wireless controlled from Headquarters.

Vaccination and Immunisation.

Free Diphtheria immunisation and Smallpox vaccination carried out by Medical Practitioners under the County Council scheme, as also is the vaccination against Poliomyelitis, Whooping Cough and Tetanus.

Treatment Centres and Clinics.

Infant Welfare, Dental, Orthophedic, Ophthalmic, E.N.T., Speech Thorapy and Child Guidance Clinics are held at Riversdale House, Sleaford. Ophthalmic and E.N.T. clinics are held at the County Council Clinic under arrangements with the Regional Hospital Boards. Surgeons and consultants attend as required and all services with the exception of Infant Welfare are by appointment only.

Blind Persons.

The responsibility for the Welfare of blind persons is under the control of the Chief Welfare Officer of the County, who employ a specialist blind welfare worker.

Children's Officer.

This office was established by the Kesteven County Council under the terms of the Children's Act, 1948.

Miss G. A. Shee, O.B.E., B.E...., County Offices, Sleaford.

Sleaford 241.

National Assistance.

The Area Office for the National Assistance Board is situated at:-

11, Avenue Road, Grantham.

Grantham 3304.

National Insurance.

The local office of the Ministry of National Insurance is situated at:-

54, Westgate, Sleaford.

Sle ford 478.

County Welf re Officer.

The County Volfare Officer is:-

J. W. Allpress, Esq., County Offices, Sleaford.

Slenford 241.

Mental Health and Welfare.

The Senior Mental Welfare Officer is:-

N. Clarko, Esq., County Offices, Sleaford.

Sleaford 241.

N.S.P.C.C.

The office of the N.S.P.C.C. Inspector for the Area is situated at:-

4, Tollbar Road, Grantham.

Grantham 4003.

Crematoria..

The only cremation facilities available to this area are situated at Grimsby, Peterborough and Nottingham, which latter place would appear to be most convenient to Sleaford. There would appear to be a need for such facilities situated nearer to this area.

Prevalence of and Control over Infectious Discuses

444 cases of infectious diseases etc. excluding Tuberculosis were notified during 1964, as compared with 470 in 1963 and 67 in 1962.

The Notification Rates per 1,000 population were as follows:-

Smallpox	0.000
Scarlet Fever	0.046
Diphtheria	0,000
Mersles	13.202
Cerebro Spinal Fever	0.000
Whooping Cough	1.610
Acute Pneumonia	0.552
Meningococcal Meningitis	0.000
Erysipelas	0.046
Acute Polionyelitis (Total)	0,000
Acute Polionyelitis (Paralytic)	0.000
Acute Poliomyelitis (Non Paralytic)	0,000
Puerperal Pyrexia	0.000
Dysentery	0.046
Chicken Pox	0.000
Malaria	0.000
Food Poisoning	0,046
Paratyphoid Fever	0.000
Typhoid Fever	0.000
Tuberculosis	0.138

Smallpox.

No care of this disease was notified in the County. The last care occurring in Kenteven in 1931, but the Public Health Inspectors have followed up and given advice to numerous contacts from other areas.

Schrlet Fever.

Only 1 case of this disease was notified during the year compared with 2 in 1963 and an average of 11 during the years 1955 - 1964.

Diphtheria.

No case of this disease has been notified in East Kesteven since 1948. Before the last war there were over 1,000 deaths per year in England and Wales from this dreaded disease. During 1964 there were no deaths. This mirroulous decline shows the marvellous results due to immunisation and I must continually re-iterate the warning to all mothers to take advantage of the protection offered by immunisation from this disease.

In England and Wales 20 cases of this disease were notified during 1964. Corrected notifications of this disease were as follows:-

12 males.	8	females	-	Total	20	cases.
1st quarter	+C.B	14	chres noti	fied.		
2nd quarter	90.90	3	chaes noti:	fied.		
3rd quarter	-	2	ordes noti:	fied.		
4th quarter		1	case notifi	ied.		

Measles.

393 cases of this disease were notified during the year. There were no deaths.

Cerebro Spinal Fever.

No case of this disease was notified during the year, the last case occurring in 1946.

Whooping Cough.

35 cases of this disease were notified during the year compared with 3 in 1963, and an average of 44 during the years 1955/64.

Pneumonia.

Only Acute Frimary and Acute Influenzal Pneumonias are notifiable and 12 cases were notified during the year compared with 8 in 1963. Deaths from all forms of Pneumonia during the year numbered 8 compared with 12 in 1963.

Meningococcal Infection.

Once again no cases were notified during the year. There was one case in 1961 and 1962.

Erysipelas.

Only 1 case of this disease was notified during the year compared with 1 in 1963 and 3 in 1962.

Acute Poliomyelitic.

No case of this disease has been notified during the year and it is gratifying to report that no cases have been notified since 1958.

Puerperal Pyrexic.

No cases were notified during the year, and in fact, no cases have been notified since 1958.

Dysentery.

1 case of this disease was notified during the year, compared with 56 in 1963 and 11 in 1962.

Malaria.

No cases of this disease have been notified since 1957.

Food Poisoning.

1 adult male notified. Salmonella typhimurium. Investigation revealed that the infected person had attended a wedding reception outside the Council's area and at which several guests had become ill.

Paratyphoid.

No cases of this disease have been notified since 1954.

Typhoid Fever.

No case of this disease actually occurring in the East Kesteven Rural Area since 1952, when there was an isolated case.

Vaccination and Immunisation

There were no changes in the County Council acheme for diphtheria and smallpox vaccination during the year, but the scheme had been extended to include whooping cough, poliomyelitis and B.C.G. Poliomyelitis vaccination was available to children from 6 months to 15 years of age, together with expectant mothers and certain specified groups. The following tables show the percentages of children protected against these diseases in Kesteven and in England and Wales.

Smallpox Vaccination.

Vaccination rate for children aged under 2 years (based on live births during the previous calendar year).

	<u> 1962</u> *	1963	1964
KESTEVEN.	50%	18%	25%
ENGLAND AND WALES.	70%	17%	32%

^{*} Outbreak of Smallpox during the year.

Diphtheria Immunisation.

Percentage of Kesteven children who have received primary immunisation (based on total live births in each year).

Born in	Born in	Born in
1962	1963	1964
68%	70%	59% *

^{*} A number of records are still outstanding for children born in 1964.

Diphtheria Immunisation.

Percentage of children under 5 who may be regarded as remaining protected against diphtheria.

	<u>1962</u>	1963	1964
KESTEVEN.	58%	60%	69%
ENGLAND AND WALES.	65%	64%	69%

Poliomyelitis Vaccination.

Percentage of infants vaccinated since January, 1961.

	Born in 1961	Born in 1962	Born in 1963	Born in* 1964
KESTEVEN.	62%	61%	61%	38%
ENGLAND AND WALES.	66%	65%	60%	Not yet known

^{*} Poliomyelitis vaccination commences at 6 months of age, therefore, only 2/3 of the children born in 1964, were eligible for vaccination at the time of calculating this figure. (16-9-65).

B.C.G. Vaccination. Kesteven County Council.

B.C.G. is offered to all school children at 13 years of age in the County of Kesteven who are shown by the Heafe skin test to be in need of protection. No separate figures are available for East Kesteven but I am most grateful to the County Medical Officer of Health for making available the figures.

		No. Skin		OF THOSE TESTED							
		Tested	Positive	Negative	Vaccinated						
1961	School Children	771	110 (14.3%)	653 (84.7%)	649						
Further Education Students		58	22 (38%)	36 (62%)	36						
1962	School Children	2,491	390 (15.6%)	1,996 (80.1%)	1,959						
1,702	Further Education Students	15	5 (33.3%)	10 (66.6%)	10						
1963	School Children	1,730	200 (11.6%)	1,475 (85.3%)	1,466						
	Further Education Students	13	6 (46%)	7 (54%)	7						
1964	School Children	1,214	136 (11.2 %)	1,053 (86.7%)	1,021						
1904	Further Education Students	9	3 (33.3%)	6 (66.6%)	6						

These figures show the high percentage of children who reach teenage without having acquired any tubercular infection. The teenage population is specially vulnerable to tubercular infection and it is important that as many as possible avail themselves of B.C.G. vaccination prior to leaving school.

INFECTIOUS DISEASES 1964.

										-	
Total.	. 10	.28	36	. 36	:42	203	54	18	13	_	447
Tuberculosis	1	1	1	1	1	1	ι	m	i	1	3 ,
Erysipelas		1	l	1	1	1	ı	1	~	1	_
Acute Pneumonia	1			1	1	1	1	-	Φ		12
Food Poisoning	ı	1	1	1	ı	ı	1	←	1	ı	7
Dysentery	1	1	i.	1	1	1	1	1		l	_
Measles	6	25	32	32	38	187	50	13	-	9	393
Whooping Gough	τ-	2	m	4	4	16	~	ι	2	l	35
Scarlet Fever	1	1	1	1	1	1	·	1	ı	1	
AGE.	Under 1 year.		2	ĸ	4	5 - 9	10 - 14	15 - 24	25 and over.	Age Unknown.	TOTAL

PARISHES.	Acute Pneumonia.	Erysipelas.	Scarlet Fever.	Weasles.	Whooping Cough.	Food Poisoning.	Dysentery.	Tuberculosis.	Total.
Anwick.	_	- 1	-	1	1		-	-	2
Asgarby & Howell.	-	_	-	5	-	-	_	-	5
Ashby & Bloxholme.	_	-	-	1	-	-	-	-	1
Aswarby & Swarby.	_	-	-	-	-	-	-	- 1	-
Aumsby & Dembleby.	_	-	-	-	_	-	-	-	-
Billinghay.	-	-	-	3	16	-	1	-	20
Blankney.	1	_	_	-	_	_	-	-	1
Brauncewell.	· -	-	_	5	_	_	_	-	5
Burton Pedwardine.	-	-	· –	11	_	_	-	-	11
Cranwell & Byards Leap.	1	_	_	4	-	-			5
Culverthorpe & Kelby.	_	-	_	_	-	-	-	_	-
Digby.	1	-	_	-	_	· · ·	-	_	1
Dogdyke.	· -	_	_	1	4	_	-	_	5
Dorrington.	1	_	-	2	_	_	-	1	4
Ewerby & Evedon.	` 1	_	-	12	_	-	-	_	13
Great Hale.	-	1	_	28	-	_	-	1	30
Heckington.	_	-	-	3	-	_	_	_	3
Helpringham.	_	_	-	90	-	_	_	_	90
Kirkby la Thorpe.	· -	<u> </u>	-	17	-	_	-	-	17
Leasingham.	-	· -	_	9	-	_	_	-	9
Little Hale.		_	_	8	_	-	-	-	8
Martin.	<u> </u>	_	1	12	1	1	_	-	15
Newton & Haceby.	_	<u> </u>	_	5	-	_	-	-	5
North Kyme.	_	-	_	3	2	_	-	-	5
North Rauceby.	_	-	-	6	_	-	-	-	6
Osbournby.	_	-	-	1	_	_	-	-	1
Rowston.	-	_	-	2	_	_	-	_	2
Roxholme.	_	_	-	4	_		_	-	4
Ruskington.	7	-	_	99	4	_	-	-	110
Scopwick.	-	_	-	10	_	-	-	1	11
Scredington.	_	_	_	25	_	_	-	_	25
Silk Willoughby.	_	_	_	-	_	-	-	_	-
South Kyme.	_	_	_	2	_	-	-	-	2
South Rauceby.	_	_	_	13	_	_	-	-	13
Swaton.	-	-	-	1	-	-	- '	-	1
Temple Bruer, etc.	-	-	-	-	-	-	_0	-	-
Threekingham.	_	_	-	4	-	-	-	-	4
Timberland.	-	-	-	4	3	-	-	-	7
Walcot B.	-	-	-	1 1	4	-	-	-	5
Walcot F.	-	-	-	j -	-	-	-	-	-
Wilsford.	-	-	-	1	-	-	-	-	11
TOTALS.	12	1	1	393	35	1	1	3	447

INFECTIOUS DISEASES -ANALYSIS IN AGE GROUPS - 1964.

Food Poisoning.	M F	1	l I	l I	1	1	1	1	1	1	1	1	1	1	-
Erysipelas.	M	1	1	1	1	1	1	1	l I	1	1		1	l I	-
Dysentery.	H H	1	l l	1	l l	ı	l I	1	1	1	l I	1	l I	-	-
Tuberculosis.	M F	I I	1	1	1	1	1	1	2	-	1	1	1	1	۳ ا
Pneumonia.	M F	1	1	1	1	1	1	1	1	1	(N)	-	2 2	, <u></u>	9 9
Measles.	M F	2 6	10 14	15 17	16 16	15 23	88 102	27 23	6 4	7	1	l I	1	1 5	182 211
Whooping Cough.	M F	-		7	1 3	2 2	9 7	2	l I	-	1	-	1 '	1	15 20
Scarlet Fever.	M F	1	1	1	1	1	1	1	1	1	1	1	1	I	-
Age Groups.		. 1-0	1-2	2-3	3-4	4-5	5-10	10-15	15-20	20-35	35-45	45-65	65 and over	Age not. known	Totals.

Seasonal Distribution of Infectious Diseases - 1964.

Food. Poiscning.	5	1	1	1	1	1	1	1	1	ı	ı	1	_
Erysipelas.	1	1	ı	1	ı	1	ı	<u></u>	ı	1	1	1	~
Dysentery.	l	l		1	ı	1	1	ı	1,	ı	1	1	₹
Tuberculosis.	ı		,	1		1	1	-	1	ı	1	1	3
P no umonia.	-		4		1	1	1	ı	ı	1	N	•	12
Measles.	09	138	134	31	13	~	1	9	<u></u>	1	_	ω	393
Whooping Cough.	-	1	1	1	i	I	0	16	5	~	~	1	35
Scarlet Fever.	1	ı	ı	1	. 1	1	1	1	1	1	l		<u></u>
MONTH.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTALS.

Notified Cases of Infectious Diseases in East Kesteven 1955 - 1964.

			-							
Disease.	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964
Scarlet Ferer.	14	30	9	3	3	28	25	4	2	-
Tuberculosis.	1	1	1	1	4	5	8	7	5	Υ
	273	Φ	649	96	265	19	170	59	395	393
Whooping Cough.	146	45	123	- 21	1	15	74	1	m	35
Acute Pneumonia.	14	Μ	59	Υ	2	18	С	9	ω.	12
Meningococcal Meningitis.		1	٣	1	1	1		~	1	1
Erysipelas.	8	т	. 4	4	2	1	2	m	_	~
Acute Policmyelitis.	4	1	-	-	1	1	ŧ	1	1.	1
Puerperal Pyrexia.	~~~	_		~	1	1	1	1	4	1
Dysentery.	, -	-	1	1	1		1	-	56	
	1	1	<u>√</u>	ı	1	1	1	ı	1	1
Food Poiscning.	5	1	-	5	444	m	1	9	1	7-
TOTALS.	459	91	828	134	280	137	277	19	470	447
	the state of the s	The state of the s	Section of the sectio	The state of the s					The second name of the second	

National Assistance Act, 1948.

It was not necessary to seek the compulsory removal of any persons under this legislation during the year. Several cases were, however, investigated, but with the assistance of the various social services it was decided to allow them to remain in their own homes.

Public Health Department,
The Hoplands,
Boston Road,
SLEAFORD,
Lincs.

September, 1965.

Mr. Chairman, Ladies and Gentlemen,

I have the honour to present to you the Annual Report on the activities of your Public Health Inspectorate for the year 1964.

Perhaps the most singularly significant achievement of the Council during the year was the completion of the new Council Offices and the rehousing of the staff in this modern administrative centre, or perhaps 1964 may be remembered for the exceptionally prolonged period of drought which began to cause anxiety in some quarters due to the likely effect of such conditions on the public and private water supplies which are dependent on the acquifer of the limestone; but whatever excites your memories of 1964 in future years it is not likely to be for any particular public health achievement, although there were many. The coming into operation of the Housing Act, 1964 was a tremendous step forward in housing legislation giving powers under certain circumstances to require the improvement of housing standards cumpulsorily. It is in this field of housing that the Public Health Inspector does some of his most outstanding work in ensuring that ordinary people's homus are fit to live in and the Association of Public Health Inspectors can take a considerable share of the credit in pressing for the writing of this improved legislation. The coming into operation of the Offices, Shops and Railway Premises Act of 1963 during the year was a further public health achievement providing legislation to secure the health, safety and welfare of persons employed to work in offices or shop More locally and of particular satisfaction to your premises. Public Health Staff was the policy decision of the Council to carry out at their own expense the connections of private houses to the new sewerage schemes already completed and in course of construction and for which I have been campaigning for so long. The approval and placing in order of priority of an eight year programme of capital expenditure for the provision of adequate sewerage arrangements for certain villages are of considerable public health importance. The more enlightened attitude towards the possibility of a more comprehensive and less onerous refuse collection service is appreciated and it is hoped that the day will not long be delayed before such improvements are implemented.

In recent years a considerable amount of legislation has appeared on the statute book and a substantial proportion of such legislation has been the concern of and has placed responsibility for its administration on your Public Health Staff. Much of this work has been routine and lacking in glamour compared with the permanent construction works carried out by you, but nevertheless it is of equal if not of paramount importance and an efficient routine public health service is one of the first lines of defence so far as the suppression of disease is concerned. The old adage "Prevention is better than cure" (and sometimes more reliable) substantiates this nineteenth century realisation. This continued increase in the amount of routine work obviously requires greater effort and is more time consuming and if it is to be carried out effectively the appointment of more staff will ultimately be necessary. To satisfy my own conscience in this respect and to ensure no neglect of my official duties the work of the Department is phased to give complete coverage of one or more particular problems of public health importance each year.

You will notice if you read this report in its entirety that without altogether neglecting the many and various duties which it is our responsibility to perform that during the year we paid particular attention to food hygiene covering all aspects of this important problem.

Your Officers have tried to the b st of their ability to carry out their duties without fear or favour, with tact, discretion and at times forebearance. Their duties may fairly be described as diverse, often dangerous, generally unpleasant, and in the nature of the work, resulting as it does frequently in the interference with the individual in the interests of the community, sometimes difficult, particularly as these duties give us considerable powers to be exercised, often to the serious financial loss to individuals, perhaps these of influence who are inclined at times to be less than appreciative of our "interference".

In submitting this report for your information I cannot conclude without taking the opportunity of recording my appreciation for the loyalty and efficiency of your two additional Public Health Inspectors, Mr. C. Rhodes and Mr. J. Wood and also to Miss G. Pattison and Miss S. Butler the Department's Clerical Staff who have performed their duties most efficiently during the year. I am also indebted to my colleagues of other Departments for their co-operation and assistance and for the pleasant relations that have at all times characterised our work.

Mr. Chairman, Ladies and Gentlemen, I am indebted to you for your patience and for your continued interest and support.

Yours respectfully,

J.A.F. Saville.

Chief Public Health Inspector.

Rent Act, 1957.

Only one certificate of disrepair was issued during the year and this legislation seems to be relatively non-effective in this area.

Improvement Grants.

The Council have been very progressive in their attitude to this legislation and have encouraged and given publicity to these provisions of the Housing Acts. The Officers of the Council have also endeavoured to assist prospective applicants for grants in a variety of ways, e.g. in interpreting the conditions relating to such grants, the inspection of occupied properties and of properties before purchase by persons interested in acquiring such properties and availing themselves of such grants.

The following information shows the number of improvement grants actually paid in respect of completed improvement schemes:-

<u>Discretionary Grants:-</u>

No. of properties improved during 1964 - 37

Total amount of grant paid in 1964 - £9,027

No. of properties improved since
 Improvement Grants became law - 562

Total amount paid in grants - £130,519-10-1d.



Housing.

When we recollect that the average person spends at least half of his life-time indoors it is apparent that the house forms a very important factor in our lives. Its condition from a sanitary point of view has considerable influence on the health of the inmates, physically, mentally, socially and morally. Not only should a house be structurally sound and free from sanitary defects but it should satisfy modern standards of comfort and convenience and any local authority housing policy should aim at providing a standard that will secure for every family in their area a home in which they can live a full, happy and contented life. In attempting to raise the standard of housing in this area your Officers have carried out a considerable amount of work under housing legislation since the last great war, coupled with improvements under the public health acts etc.

Slum Clearance.

The Council's Slum Clearance Programme continued during 1964 and during the year seven Demolition Orders and two Closing Orders were made in respect of individually unfit houses. During the same period fifteen individually unfit houses were demolished. Thirteen houses included in two clearance areas were also demolished and six individually unfit dwellings subject to demoliton orders or undertakings not to relet were made fit. Seven families were rehoused from unfit dwellings during the year and several found their own accommodation.

There were forty-two houses still occupied at the end of the year that were the subject of demoliton or clearance orders but it is hoped that the majority of these will be rehoused during 1965, provision already having been made for the construction of dwellings to rehouse the occupants of houses subject to clearance orders in the parish of Heckington.

The official Slum Clearance Programme initiated in 1955 is virtually complete but houses like anything else become worn out and obsolete through old age and disrepair and a preliminary survey during the year suggested that as the improvement programme was initiated there may be something like a further two-hundred houses that would warrant slum clearance action, the majority of which would be individually unfit houses and a considerable number of these owing to their location in isolated parts of the area would not be an economic proposition to make fit and in any case persons are relectant to occupy houses far removed from the amenities of village life. The general needs of slum clearance in the future are likely to be met by normal relets without the need for any special housing programme. The need would now appear to be in providing more accommodation for the elderly.

Standard Grants.

No. of properties improved in 1964.

Amount of grants pid in 1964.

No. of properties improved since Standard

Grants became law.

Total amount paid in grants.

- 36

£4,251-4-0d.

Totals. 654 houses improved. £140,040-14-7d. paid in grants.

The routine house to house inspection of sub-standard houses was commenced during the year and over 150 houses were fully inspected and owners invited to apply for improvement grants, and there appeared to be some response to these appeals.

However, towards the end of the year new legislation became law which gave local authorities increased powers to require in certain conditions the compulsory improvement of such dwellings having a reasonable period of life and for the inclusion of groups of houses in improvement areas. The purpose behind the provisons of parts II and III of the Housing Act, 1964, is to secure that within the next ten years most of the two million or so improvable older houses in the Country which lack amenities and which still have a reasonable life are brought up to standard. Nationally this involves increasing the present rate of improvement from some 130,000 a year to 200,000 a year as soon as possible. The Council resolved to carry out a programme based on a period of 10 years to secure the improvement of all such properities in their area, which is estimated to be some 1,500 dwellings which are lacking in one or more of the requirements that are considered to be essential in a decent dwelling, and approval in principle was given during the year for provision to be made in the estimates for 1965 for a Technical Assistant to be appointed to assist in this work. The Council were also sympathetic in the making of loans where applicants found difficulty in raising their share of the costs of improvements and repairs.

Although the amount of time spent by your Officers in inspecting houses, advising owners and builders on the facilities available is substantial and whilst the response is not overwhelming, the results when achieved are very satisfying and worthwhile.

There are also occasions where landlords are prepared to carry out improvements that the tenants refuse their consent for some reason, particularly in respect of the elderly occupier who either thinks he is unable to pay the increased rental or reluctant to do so. There are others also who would appear that they would rather not forego the pleasures of television, etc. than pay considerable less in most cases to receive the benefits of modern amenities. There is also another small section of the community who have for so long received the privileges of low rentals that they consider any substantial increase in rent to be totally unnecessary - no doubt before so very much longer they will be in for a rude awakening and we must admit that the landlord must receive an adequate return for his investment if he is to keep such rented property in a reasonable condition.

The provisions contained in the new Housing Act where tenants can make representations to the Local Authority for action to be taken to require the landlord to compulsory improve their dwellings will give us an indication as to whether or not I am right in this assumption.

Summary of new dwellings completed during the year:-

```
Council Houses or Bungalows: -
     Anwick.
                               2
    Billinghay.
                              12
     Cranwell.
                               2
    Heckington.
                               2
    Kirkby la Thorpe
         (The Hoplands).
    Martin Dales.
                              12
    Ruskington.
                              37
                              71
Private Houses or
      Bungalows completed.
                             '46
```

In addition the following Council Houses or Bungalows were under construction at the end of the year:-

Anwick.	-	8
Heckington.	-	18
Ruskington.	-	19
		37 -

Caravan Sites and Control of Development Act, 1960.

The number of sites licensed under this Act increased during the year but there was a noticeable decrease in the number of caravans on the larger sites. This was presumably due to the extensive housing development at R.A.F. Digby and to some extent by the reduction in numbers of oivil service employees at the same service establishment, thus releasing more Council houses to let.

There were twelve individual caravans on residential sites and one individual caravan on a holiday site. Of the larger sites one licensed for thirty-two caravans is only partially complete and occupied, the developer having get into financial difficulties. One site licensed for twenty-five caravans has not been developed at all and the Council's site at Kirkstead Bridge was still incomplete awaiting the prevision of a toilet block etc. The larger sites could accommodate if developed 190 caravans for residential purposes and seventeen for holiday purposes.

Some routine enforcement of the Act has been necessary in respect of licensed premises in the area. Correspondence with the Brewery Companies concerned has resulted in certain effending caravans being removed. Generally the sites are maintained and provided with amenities better than the standard required by law and there has been a noticeable increase in the number of caravans fitted with modern bathrooms and W.C.s. The following table shows the location, type of site, permitted capacity and actual number of vans stationed as at the end of 1964.

PARISH.	TYPE OF SITE.	NO. OF CARAVANS LICENSED FOR.	NO. OF CARAVANS DECEMBER, 1964.
Anwick.	Residential.	1	1
Billinghay.	Residential. Residential.	1 1	1 1
Brauncewell.	Residential.	25	Not developed.
Cranwell.	Residential. Residential.	1 1	1 1
Dogdyke.	Holiday. Holiday.	3 6	3 6
Helpringham.	Residential.	1	. 1 1
Leasingham.	Residential.	1	Not developed.
Mortin.	Residential. Residential. Holiday.	1 20 8	1 Not devel(ped. 8
Rowston.	Residential.	1	Not developed.
Ruskington.	Residential. Residential. Residential. Residential.	1 1 20 52 3	1 1 15 35 3
Scopwick.	Residential. Residential.	1 32	1 4
Scuth Rauceby.	Residential.	24	Not developed.
Threekingham.	Residential.	1	1
Timberland.	Holiday.	1	1
	TOTALS.	208	87

Water Supplies.

Water, like air and food, is one of the prime necessities of life, animal or vegetable. It enters into the composition of nearly everything in nature. Everyone knows about the disastrous effects of unsatisfied bodily thirst. The human body is made up of 75% of water, hence the daily need is not inconsiderable. Water is an essential factor also in personal, domestic and public hygiene as well as for agriculture and industry, hence the need for a plentiful supply to populous places which can be easily tapped by every consumer.

It is to be expected that as the general standard of housing improves by the erection of modern homes, provision of water-closets, baths and a constant supply of hot water and by the demolition or closure of unfit houses, the average daily consumption of water per head will continue to rise.

In accordance with the provision of Part II of the Public Health Act, 1936, as amended by the Water Act, 1945, the Council in recent years fulfilled to a considerable extent their obligations in providing an adequate and wholesome water supply for the major part of their area by means of a Regional Nater Scheme, which is now the responsibility of the Kesteven Water Board, and I am indebted to the Clerk of the Board for the following information regarding public water supplies in this area:-

The sources of supply for East Kesteven Area during 1964 were from bores into the Lincolnshire limestone situated at Drove Lane, Sleaford, and Ashby de la Launde. No major schemes of water distribution were commenced or completed in this district during the year.

Whilst the Kesteven Water Board is responsible for the Water Undertakings provided for this area the Public Health Department continues to satisfy itself that the water provided is wholesome and of satisfactory bacterial quality and during the year 147 samples of water were taken from the public supply for bactericlogical examination with highly satisfactory results. Copies of the Bacteriologist's reports are forwarded to the Water Board's Engineer. In addition occasional samples are taken for chemical examination all of which have proved satisfactory although relatively "hard".

There are a few private supplies still in use in the area and samples are taken when considered necessary.

In this connection when investigating the death of a young child (found ultimately not to be connected with water) samples were taken of private supplies in the Temple Bruer/Brauncewell area, situated on the limestone where results proved to be highly unsatisfactory. As a result of these unsatisfactory bacteriological reports it was decided to carry out a comprehensive sampling progranme and investigation in this particular area not served by the public supply when it was found that all the wells supplying water in this particular area were polluted in varying degrees. Five shallow wells were involved ranging in depth from 43 ft. to 100 ft. and with an average water depth of 3 ft. except in the case of the deepest which had a water depth of 84 ft. Coliform organisms of B.coli varied up to a figure of 180+ in these samples. Pollution of these wells was obviously occurring or had occurred probably aggravated by the abnormally dry weather conditions. The area is located on the Lincolnshire limestone which is commonly known to be fissured and cracked and seepage may have occurred from septic tanks, crewyards, etc. in close proximity to the wells or may even have been drawn in from further afield due to the exceptionally low water table generally prevailing at this time.

We considered the bacteriological results to be unsatisfactory and were supported in this assumption by the Director of the Public Health Laboratory serving the area who visited the location and agreed to support our interpretation. Even if subsequent samples proved satisfactory on occasions the lack of treatment and the uncertainty of the bacteriological purity warranted some action. The consumers were warned to sterilise this water before use for human consumption and the Council resolved to request the Water Board to prepare a scheme for a public supply to this area for submission to the Minister.

65 samples were submitted for bacteriological examination in connection with this investigation.

So far as the provision of piped water supplies actually in dwellinghouses are concerned, in 1951 there were 1,837 houses entirely without and 246 sharing with other premises. Today there are relatively few houses in the area without an internal piped supply of water and whilst no actual figures are available, from a sound knowledge of the sanitary circumstances of the district most of these houses will be dealt with as slum clearance or will become redundant. In this connection your public health staff have mainly by informal action and personal approach during the past 10 years contributed in no small measure to the success of this operation.

RESULTS OF BACTERIOLOGICAL EXAMINATION

OF WATER DURING 1964.

Public Supply.

Date	Parish	Result
2-1-64。 2-1-64。	Hoplands Depot. Silk Willoughby.	Satisfactory.
•	· · · · ·	do.
9-1-64.	Dembleby.	
9-1-64。 9-1-64。	Osbournby.	do. do.
9-1-64.	Swarby.	do.
	Aunsby.	do.
9-1-64. 15-1-54.	Newton.	do.
	Anwick.	
15-1-64.	Ruskington.	do. do.
151-64。 151-64。	Leasingham.	do.
15-1-64	Ashby. Billinghay.	do.
23-1-64.	Rowston.	do.
23-1-64.		do.
23-1-64.	South Rauceby. Digby.	do.
23-1-64.	Wilsford.	do.
30-1-64.	Heckington.	do.
30-1-64.	Great Hale.	do.
30-1-64.	Burton Pedeardine.	do.
30-1-64.	Helpring am.	do.
30-1-64.	Little Hale.	do.
30-1-64.	Walcot (F).	do.
30-1-64.	Asgarby.	Unsatisfactory.
6-2-64.	Walcot (F).	
6-2-64.	North Rauceby.	Satisfactory.
6-2-64.	Threekingham.	do. do.
6-2-64.	Swaton.	do.
6-2-64.	Culverthorpe.	do.
6-2-64.	Scredington.	
13-2-64.	_	do. do.
13-2-64.	South Kyme. Walcot (B).	do.
13-2-64.	Dorrington.	do.
13-2-64.	North Kyme.	do.
13-2-64.	Hoplands Depot.	
20-2-64.	Rowston.	do. do.
20-2-64.	Scopwick.	do.
27-2-64,	Blankney.	do.
27-2-64.	Timborland.	do.
27-2-64.	Martin.	do.
27-2-64.	Asgarby.	do.
12-3-64.	Leasingham.	do.
12-3-64.	Brouncewell.	do.
19-3-64.	Ewerby.	do.
19-3-64.	Silk Willoughby.	do.
19-3-64.	Roxholm.	do.
19-3-64.	Dogdyke.	do.
19-3-64.	Brouncewell.	do.
19-3-64.	Temple Bruer.	do.
2-4-64.	Anwick.	do.
2-4-64.	Swarby.	do.
2-4-64.	Billinghay.	do.
2-4-64.	Osbournby.	do.
9-4-64.	Burton Pedwardine.	do.
9-4-64.	Heckington.	do.
9-4-64.	Great Hale.	do.
9-4-64.	Little Hale.	do.
9-4-64.	Helpringlam.	do.

Date	<u>Parish</u>	Result
16-4-64.	Aunsby.	Satisfactory.
16-4-64.	Wilcot (F).	do.
16-4-64.	Newton.	do.
23-4-64.	Digby.	do.
23-4-64.	Cronwell.	do.
23-4-64.	Ruskington.	do.
23-4-64.	Ashby.	do.
23-4-64.	Kirkby la Thorpe.	do.
30-4-64.	South Rauceby.	do.
30-4-64.	Swaton.	do.
30-4-64.	Scredington.	do.
30-4-64.	North Rouceby.	do.
7-5-64. 7-5-64.	Ewerby. North Kyme.	do. do.
7-5-64.	South Kyme.	do.
7-5-64.	Chapel Hill.	do.
28-5-64.	Martin.	do.
28-5-64.	Rowston.	do.
28-5-64.	Timberland.	do.
28-5-64.	Dorrington.	do.
4-6-64.	Brouncewell.	do.
4-6-64.	Everby Thorpe.	do.
4-6-64.	Leasingham.	do.
11-6-64.	Heckington.	do.
11-6-64.	Helpringham.	do.
11-6-64.	Asgriby.	Unsatisfactory.
11-6-64.	Elierby.	Suspicious.
19-6-64.	Kirkby la Thorpe.	Satisfactory.
19-6-64.	Swarby.	do.
19-6-64.	Asg rby.	do.
19-6-64.	Anvick.	do.
25-6-64.	Walcot (B).	do.
25 - 6 - 64.	Scopwick. Blankney.	do.
2-7-64.	Wilsford.	do. do.
2-7-64.	Osbournby.	do.
2-7-64.	Silk Willoughby.	do.
2-7-64.	Aunsby,	do:
2-7-64.	Scredington.	do.
2-7-64.	Threekingham.	do.
9-7-64.	Burton Pedwardine.	do.
9-7-64.	Swaton.	do.
9-7-64.	Great Hale.	do.
9-7-64.	Little Hale.	do.
16-7-64.	Ashby.	• do.
16-7-64.	Digby.	do.
16-7-64.	Dorrington.	do.
16-7-64.	Cranwell.	do.
23-7-64. 23-7-64.	North Rauceby. Culverthorpe.	do. do.
23-7-64.	South Rauceby.	do.
30-7-64.	South Kyme.	do.
30-7-64.	North Kyme.	do.
30-7-64.	Billinghay.	do.
13-8-64.	Brauncewell.	Unsatisfactory.
13-8-64.	Kirkby la Thorpe.	Satisfactory.
13-8-64.	Roxholm.	do.
13-8-64.	Leasingham.	do.
20-8-64.	Ewerby.	do.
20-8-64.	Ruskington.	do.
20-8-64.	Asgarby.	do.
20-8-64.	Anwick.	do.
20-8-64.	Heckington.	do.

Date	<u>Parish</u>	Result
17-9-64.	Brauncewell.	Satisfactory.
24-9-64.	Kirkby la Thorpe.	do.
5-11-64.	Anwick.	do.
5-11-64.	Leasingham.	do.
5-11-64.	Ewerby.	do.
5-11-64.	Ruskington.	do.
5-11-64.	Dorrington.	do.
5-11-64.	Roxholm.	Unsatisfactory.
19-11-64.	Little Halo.	Satisfactory.
19-11-64.	Heckington.	do.
19-11-64.	Great Hale.	do.
19-11-64.	Scredington.	do.
19-11-64.	Helpringham.	do.
19-11-64.	Asgarby.	do.
26-11-64.	South Rauceby.	do.
26-11-64.	North Rauceby.	do.
26-11-64.	Culverthorpe.	do.
26-11-64.	Swarby.	do.
26-11-64.	Wilsford.	do.
26-11-64.	Silk Willoughby.	do.
3-12-64.	Ewerby.	do.
3-12-64.	Helpringham.	do.
3-12-64.	Kirkby la Thorpe.	do.
3-12-64.	Burton Pedwardine.	do.
17-12-64.	South Rauceby.	do.
17-12-64.	Cronwell.	do.
17-12-64.	Brouncewell.	do.

Private Supply.

2-1-64.	Silk Willoughby	•	Satisfactory.
20-2-64,	North Rauceby.		do.
20-2-64.	Nort! Rauceby.		do.
19-3-64.	Little Hale.		do.
16-4-64.	Threckingham.		do.
30-4-64.	Swaton Fen.		do.
25-6-64.	Roxholm.		do.
16-7-64.	Temple Bruer.		Unsatisfactory.
23-7-64.	Temple Brucr.		Suspicious.
30-7-64.	Temple Bruer.		Satisfactory.
30-7-64.	Temple Bruer,		Unsatisfactory.
5-8-64.	Temple Bruer.		do,
6-8-64.	Temple Bruer.		Doubtful.
6-8-64.	Temple Bruer.		Unsatisfactory.
13-8-64.	Temple Bruer.		do.
27-8-64.	Temple Bruer.		do.
27-8-64.	Temple Bruer.		do.
27-8-64.	Temple Bruer.		do.
27-8-64.	Temple Bruer.		do.
3-9-64.	Temple Bruer.		do.
3-9-64.	Temple Bruer.		do.
3-9-64.	Temple Bruer.		do.
3-9-64.	High Dyke Farm,	Wellingore.	do.
10-9-64.	Temple Bruer.		do.
10-9-64.	Temple Bruer.		Suspicious.
10-9-64.	Temple Bruer.		Unsatisfactory.
10-9-64.	High Dyke Farm,	Wellingore.	do.
14-9-64.	Temple Bruer.		do.
14-9-64.	High Dyke Farm,	Wellingore.	Satisfactory.
14-9-64.	Temple Bruer.		do.
		_ 13 .	

Date	Phrish		Result
17-9-64. 17-9-64. 17-9-64. 17-9-64. 17-9-64.	High Dyke Farm, High Dyke Farm, Temple Bruer. Temple Bruer. Temple Bruer. Temple Bruer.	Wellingore.	Satisfactory. Unsatisfactory. Satisfactory. Unsatisfactory. do. do.
24-9-64. 24-9-64. 24-9-64. 24-9-64.	High Dyke Form, High Dyke Form, Temple Bruer. Temple Bruer.	Wellingore. Wellingore.	do. do. do. do.
1-10-64. 1-10-64. 1-10-64. 1-10-64.	High Dyke Farm, High Dyke Farm, Temple Bruer. Temple Bruer.	Wellingore. Wellingore.	do. do. do. do.
1-10-64. 1-10-64. 1-10-64. 1-10-64.	Temple Bruer. Temple Bruer. Temple Bruer. Temple Bruer.		Suspicious. do. Unstisfactory. do.
5-10-64. 5-10-64. 5-10-64.	High Dyke Farm, High Dyke Farm, High Dyke Farm,	Wellingore. Wellingore. Wellingore. Wellingore.	do. Suspicious. Unsatisfactory. Satisfactory.
5-10-64. 5-10-64. 8-10-64. 8-10-64.	High Dyke Farm, Temple Bruer. Temple Bruer. Temple Bruer. Temple Bruer.	Wellingore.	Unsatisfactory. do. Satisfactory. Unsatisfactory. do.
8-10-64. 8-10-64. 15-10-64.	High Dyke Farm, Temple Bruer. Temple Bruer. Temple Bruer.	Wellingore.	do. do. Satisfactory. do.
15-10-64. 15-10-64. 20-10-64. 20-10-64. 20-10-64.	High Dyke Farm, Temple Brucr. Ashby. Ashby. Asl by.	wellingore.	Unsatisfactory. do. Satisfactory. do. do.
20-10-64. 22-10-64. 22-10-64. 22-10-64.	Ashby. Ashby. Temple Bruer. Figh Dyke Farm,	Wellingore.	Suspicious. Satisfactory. Suspicious. do.
22-10-64. 22-10-64. 17-12-64.	Temple Bruer. Swaton Fen. Ligh Dyke Farm,	Wellingore.	Unsatisfactory. Satisfactory. Unsatisfactory.

This water contains	SUPP	LY.
per million parts.	Drove Lane	Ashby de la Launde.
Total Solids dried 180°C. Suspended Matter. Chlorides as Chlorine. Nitrate Nitrogen. Nitrite Nitrogen. Ammoniacal Nitrogen. Carbonate Hardness. Non-Carbonate Hardness. Excess alkalinity as Sodium Carbonate. Oxygen absorbed from N/80 KMn04 in 4 hrs. @ 27°C. pH Value. Odour and Taste. Colour - Hazen Units. Heavy Metals. Free Chlorine.	455.00 Absent 35.50 6.59 0.002 0.004 0.040 202.50 147.50 - 0.08 7.3 Normal Less than 5 Absent Absent	522.00 Absent 48.70 12.36 0.001 0.004 0.048 200.00 188.00 0.08 7.2 Normal Less than 5 Absent Absent
Mineral Analysis. Free Carbon Dioxide.		r million.
Dissolved Oxygen. Temperature	6.2 7.4	10.4 7.2
Calcium as Ca. Hagnesium as Mg. Sodium as Na. Iron as Fe. Carbonates as CO ₃ Sulphates as SO ₄ Nitrates as NO ₃ Silicates as SiO ₃ Fluorides as F	130.4	147.2 4.3 25.0 0.0 120.0 104.5 54.7 13.9 0.07
Probable composition per million parts. Calcium Carbonate, CaCO3 Calcium Sulphate, CaSO4 Calcium Chloride, CaCl2 Magnesium Chloride, MgCl2 Magnesium Nitrate, MgNO3 Sodium Chloride, NaCl Sodium Nitrate, NaNO3 Sodium Silicate, NaSiO3 Sodium Fluoride, NaF Iron Oxide, Fe2O3	202.50 138.60 23.80 22.70 - 5.60 40.00 20.30 0.29 0.00	200.00 148.00 65.60 9.10 12.20 61.00 22.30 0.15 0.00

Chemical Examination of Private Water Supplies.

		SUPPLY.	
This water contains per million parts.	Thompson's Bottom, Temple Bruer.	Mountain's Farm, Temple Bruer.	Ruskington Foods:
Total Solids dried 180°C. Suspended Matter. Chlorides as Chlorine. Nitrate Nitrogen. Nitrite Nitrogen. Ammoniacal Nitrogen. Carbonate Hardness. Non-Carbonate Hardness. Excess Alkalinity as Sodium Carbonate. Oxygen absorbed from N/80 Kmn04 in 4 hrs. @ 27°C. pH Value. Odour and Taste. Colour - Hazen units. Heavy Metals. Free Chlorine. No. of colonies developing per ml. on agar at 21°C. in 72 hrs. No. of colonies developing per ml. on agar 37°C. in 24 hrs. No. of colonies developing per ml. on agar 37°C. in 48 hrs. Coli-aerogenes count per 100 mls. at 37°C. in 48 hrs. Faecal coli count per 100 mls. at 44°C. in 48 hrs.	529.00 Absent 30.20 0.21 0.001 0.004 0.004 268.00 132.00 - 0.00 7.3 Normal Less than 5 Absent Absent	500.00 Absent 37.30 0.21 Absent 0.004 0.004 253.00 125.00 - 0.12 7.3 Normal Less than 5 Absent Absent	486.00 Absent 30.20 0.21 Absent 0.004 0.004 210.00 108.00 - 0.18 7.1 Normal 30 Absent Absent
Bacillus Coli (Presumptive).	ecres	game	

At the time of sampling these waters satisfied the standard of bacterial quality required by the Ministry of Health; these waters were also of suitable chemical quality for human consumption, domestic use and dairy purposes.

A water with under 50 parts per million of hardness may be said to be soft. A water with 50 to 100 parts per million of hardness may be said to be moderately soft. A water with 100 to 150 parts per million may be said to be slightly hard. A water with over 200 parts per million and under 300 parts per million of hardness may be said to be A water with over 300 parts per million of hardness may be said to be very hard or excessively hard. The waters now used in the public supply in this district are of a neutral reaction: pH values approximating 7.30. None of the waters show any evidence of plumbosolvency. The waters are generally HARD. Temporary Hardness - due to carbonates of calcium and magnesium - reduced by boiling which throws the carbonates out of solution by the loss of carbonic acid. Average 203.0 p.p.m. Permanent Hardness - Usually is due to the presence of sulphates of calcium and magnesium, but occasionally to chlorides and nitrates also. Ranges from 96.00 p.p.m. to 167 p.p.m. Average 139.0 p.p.m. Total Hardness - varies from 296 p.p.m. to 372 p.p.m. Average 342 p.p.m. The presence of Sodium Fluoride in waters used by the public in this area is very low (approximately 0.15/0.29 p.p.m. parts per million). This element when present in concentrations of approximately 1 part per million plays an important role in the protection of tecth from decay. - 47 -

Drainage and Sewerage.

The existing sewerage arrangements in this district with a few notable exceptions in the larger villages are old, inadequate and inefficient; in the majority of cases there being little or no treatment before discharging into streams or watercourses, commonly referred to in this area as "sewer dykes". These "sewer dykes" especially during the summer menths, are a constant scurce of trouble and it is only by frequent cleansing and attention that the nuisances are temporarily alleviated; and here I should like to make it clear that whilst the cleansing helps to remove or alleviates temporarily the annoyance to the human senses the dangers of pollution with its subsequent contamination of food. water, milk and indeed the human body, by bacterial, virus, parasites and flies etc., still remains a very real public health Children and animals particularly delight in playing in water and as mentioned elsewhere in this report, redents are by no means choosey as to the chemical or bacteriological content of such waters.

Just how many miles of polluted dykes and ditches there are in this district of our's I do not know, but the number must be pretty high. The pollution of dykes and ditches by domestic and farm sewage converts such watercourses into elongated stinking sludge beds. Whilst most of the piped sewers in the district were criginally constructed as surface water sewers they have become by usage, combined sewers that are largely overloaded. With a rising standard of living in the countryside as well as in the more populous places the residents are insisting quite rightly on a better and more comfortable way of life. Amenities such as internal water supplies, water borne sanitation, baths and sinks were not so very long ago looked upon as something of a luxury in rural areas but in this respect in this area considerable improvements have been affected by your public health officers ever the past ten years in improving housing and sanitary conditions generally. The completion of the regional water scheme now the responsibility of the Kesteven Water Board, bas made water readily available to the public and improvements in housing and sanitation must as is obvious mean an increase in the daily consumption of water, a considerable amount of which ultimately has to be dealt with as sewage. It is obvious, therefore, that the construction of adequate sewerage and sewage disposal works should not have been divorced from the provision of piped water supplies and if any real sanitary progress is to be made then it is absolutely essential that these services should progress together. The expression "sewer dyke" should not be used - for too long has the pollution of these watercourses been regarded as an inevitable adjunct to country life and the pollution of a stream or watercourse in contravention of public health legislation does not turn such watercourse into a sewer, nor do repeated acts in violation of the statute, confer any rights on the wrongdoor. To acclaim what should be a watercourse as a "sewer dyke" and to countenance its use as such shows an indifference to real sanitary progress. In this respect we can expect more pressure being applied in the future by River Authorities to remedy these shortcomings. Some improvements have been effected in recent years, however, particularly at Anwick, Ashby de la Launde, Billinghay, Cranwell, Dorrington, Martin, North Rauceby, Ruskington and South Rauceby.

The Council are only too well aware of the problem and their responsibilities in this sphere. Progress made in improving such conditions in the area during the year were as follows:-

Kirkstead Bridge

(Martin Dales). - Aeration plant completed.

Leasingham. Silk Willoughby. - Comprehensive sewage scheme work in progress.

Silk Willoughby. Blankney.

- Tenders received.
- Preliminary work.

Helpringham.

- Contract signed for comprehensive scheme.

Several sewerage schemes completed some few years ago, notably Billinghay and Ruskington were not being fully made use of as connections from private houses was on a purely voluntary basis and the property owners concerned appeared reluctant to make these expensive connections to the sewerage system particularly as it involved the extra cost of separating surface water from foul drainage. This resulted in a state of affairs where pollution still existed after expensive construction works had been carried out with the scle object of eliminating the necessity for such discharges. However, towards the end of the year the Council decided that in future such conditions should not arise and recommended that all necessary connections be made to future sewerage schemes at their expense and that the outstanding deficiencies in this connection be remedied by direct labour. They approved a comprehensive policy of improvements based on a system of priorities over an eight year programme of capital expenditure as follows:-

	Scheme.	Estimated Total Cost of Scheme.	1 £ 000	2 £	Num 3 € 000	ber 4 £	of Yo 5 £ 000	6 £	7 £ 000	8 £ 000
1.	House drain	ì								
	connections.	152,000	30	30	30	30	32			
	Helpringham.	54 , 000	40	14						
	Silk Willoughby.	35,000	25	10						
4.	Kirkby la Thorpe.	40,000			20	20				
5.	Digby.	60,000					40	20		
	North Kyme.	30,000						30		
7.	Walcot B.	60,000							50	10
8.	Little Hale.	25,000	_							25
9.	Blankney.	25,000	5	20						
		£481,000	100	74	50	50	72	50	50	35

Your Officers had the difficult task of assessing the degree of priority for such schemes and it was gratifying to report that your Surveyor, the Fisheries and Pollution Officer of the Lincolnshire River Authority and myself arrived at the same conclusion without any collusion. The principle reasons substantiating our recommendations are enumerated below:-

- 1. Helpringham. This village is virtually surrounded and traversed by open sewer dykes taking crude effluents in many cases without any primary settlement. In the centre of the village there are two open dykes where solids (crude sewage) are visible. Construction in progress.
- 2. Silk Willoughby. The existing sewer in this village was so unsatisfactory as to be constantly in need of attention and apart from the fact that there was no treatment of the effluent which discharges into an open dyke, the sewer urgently required replacing. Virtually all houses have modern amenities. In progress.
- 3. Kirkby la Thorpe. Conditions in this village have been the concern of the Council for many years and in the various programmes prepared this village has always been placed high in the list of priorities. Numerous dykes and ditches are grossly polluted and the existing old main sewer in Mount Lane is a constant source of trouble, treatment is virtually non-existent and the small septic tank is no more than a catchpit being totally inadequate to restrain the passage of solids. Sewage from Church Lane has no treatment whatsoever before discharge into watercourse.
- 4. Digby. Dykes in the centre of the village are polluted and the main discharge into the beck is totally unacceptable.

- 5. North Kyme. Numerous polluted dykes and ditches from inadequately treated sewage and lack of sewers in major part of village, prejudicing further housing development.
- 6. Walcot B. Cross pollution of dykes and totally inadequate sewers. No treatment except for Council Estate.
- 7. Little Hale. Pollution of main watercourse through village. Relatively small scheme. Given priority as it should obviously be combined with the Helpringham scheme and it is proposed to pump the sewage for treatment in the Helpringham disposal works. Council decision to include in eight year programme.
- Practically all the houses in this village are now 8. Blankney. provided with modern amenities, discharging into an ancient box barrel sewer of small dimensions and capped with stone slabs. During the year the sewer became choked solid for almost the whole length of the village and the top of the sewer had to be removed and the contents dug out to clear same at considerable expense to the Estate Owners who carried out this work as a matter of urgency to avoid serious public health problems. The top was replaced and covered with polythene to prevent soil choking the sewer. Being constructed of dry stone and only some 5" wide it is not expected to last much longer without further trouble. obvious after inspection that a comprehensive scheme for this village was an urgent necessity and the phasing of the scheme had to be accelerated to 1965/7. The discharge without treatment is to a watercourse. Negotiations are being conducted to pump the sewage to Metheringham Disposal Works, in the North Kesteven Rural District.

It was realised of course, that this list of priorities would not satisfy everyone and it was not long before representations were made on behalf of the needs of Scopwick to be considered as deserving of priority. I was, therefore, instructed to investigate the conditions at Scopwick and Kirkby Green and after considering my report the Council, whilst having every sympathy with the needs of Scopwick could not agree to make any change in the order of priorities but instructed me to take action under the provisions of the Public Health Acts, against individuals causing a nuisance by inadequate or inefficient private disposal systems, and approved the construction of a septic tank on the outfall at Kirkby Green to temporarily alleviate the discharge of solids at that point.

The Council realise, of course, that in this modern age every village or community should be served by a comprehensive sewerage system but such a desirable state of affairs cannot be implemented in a relatively short period of time and we must, of course, proceed on a system of priorities.

The inspection and testing of private drainage is a responsibility of your Inspectors. Builders are encouraged to solicit our advice before carrying out construction if in doubt and this is desirable where septic tank systems are installed. In this connection over 200 visits were made during the year. There have been relatively few cases when approval has not been given, when the work has been carried out by competent labour but with the increased activities of unskilled labour and do-it-yourself enthusiasts it is essential that this work be properly supervised. More trouble was experienced in the practice of builders not making adequate provision for sub-surface irrigation in connection with septic tank disposal systems and all too often they economise only to find that after a few years the system fails to function. Detailed drawings and advice is given in regard to all such development.

Five houses were connected to sewers under the provisions of Section 42 of the Public Health Act, 1936 at the expense of the Local Authority and three closet conversions were effected under the provisions of Section 47 of the Public Health Act, 1936 at the joint expense of the owner and of the Local Authority. Considerable progress has been made during the past 10 years in the conversion of earth closets particularly by way of improvement grants and it is estimated that there are now only approximately 200 earth closets in use in the area, although some of these are still within the built up areas served by sewers. — 50 —

	· odour.	드	100	Z	A
	Colour,	×	SY	SY	SY
	'ppostanco.	H	덚	덩	ST
[soi	5 days Biochen Oxygen Dosend At 20°C.	252.0	9.5	,22.5	18.0
	onlaV Hq	7.3	7.7	7.9	7.6
t	Oxygen sbsorbo OnlN 08/N mort S ts .erf 4 ni	43.4	8.0	14.1	7.6
	on Vikalinity ca Calcium Carbonate,	355.0	205.00	360,00	340,0
parts	Nitrito Ni trogen.	00.00	90.0	0,20	0.25
per million parts	otsatiN Artrogoni	0,21	24.72	16.45	17.51
	bionimudi.\ .sinomu\	7.2	0.64	2,72	1,92
contains	bns oor'i onile2 .sinomn\	23.0	2.08	20.00	11,20
flucnt	dhlorides as Chlorine.	106.5	113.6	106.5	120.7
This of	bobnogau2 .rottali	104.0	26.00	24.00	18,0
	Where sample taken from and dete of sampling.	Anvick. 6/2/64.	Billing: 33. 6/2/64.	Cranuoll. 6/2/64.	Ruskington. 6/2/64.
	Sample No.	0	ŝ	ů	4.
1					

N - Normal. SY - Slightly Yellow. F - Foul. ST - Slightly Turbid. Y - Yellow. T - Turbid.

A sownge offluent suitable for free discharge into inland waters abould satisfy the following conditions (parts per million) :-

should not contain excessive asounts of ingredients of a harmful or toxic nature (a) the suspended matter should not exceed 30.0 (b) the expense absorbed from N/80 KHnO4 in 4 hours should not exceed 15.0 (c) the 5 days Biological Oxygen Denand should not exceed 20.0 (d) should not contain excessive asounts of ingredients of a harmful or te

Sample 1 did not satisfy (a), (b) and (c) of the above standards. Sample 2 satisfied all the above standards. Sample 3 did not satisfy (c) of the above standards. Sample 4 satisfied all the above standards.

Public Cleansing.

The present system of refuse collection, covering the whole of the Council's area with the exception of Air Ministry property at Cranwell and a very few isolated dwellings, is based on a weekly collection for the larger parishes of Billinghay and Walcot, Ruskington, Heckington and Digby Camp and a fortnightly service for the remainder of the district.

The collection is a kerbside collection requiring householders to place their bins at a convenient point adjacent to the highway to facilitate the work of collection. In exceptional cases, owing to old age, informity or other apparent reasonable cause, the bins are carried out by your workmen, This is one aspect of the service that is tending to increase and many excuses are made as to why the workmen should carry bins out. Occasional complaints are made by neighbours of the favoured who consider that such persons are equally capable of carrying out their own bins and of course there are the few who consider it heneath their dignity to carry the bins to the kerbside - or alternatively are very well acquainted with the law and realise that the Authority cannot be too dogmatic over this question of insisting on the bin being placed at a convenient point adjacent to the highway. The only solution, of course, is to adopt a "carryout system" of refuse collection and from a public health viewpoint it cannot be denied that refuse should be stored under hygienic conditions and be removed from the premises as rapidly as possible. A frequency of emptying of less than weekly in a populated area is in my opinion a just cause for complaint and public opinion is gradually voicing complaints more vigorously than heretofore, particularly amongst the inward migrating members of the population who have experienced the benefits of a more comprehensive and less onerous service. In this respect I am sure that if the unenlightened members of the Council were on the receiving end of the telephone when irate ratepayers complain in no uncertain manner of their "rights" in this respect they would be hard put to find excuses as to why the present system continues to operate in this supposedly enlightened era.

Towards the close of the year the Council decided to consider a comprehensive report to be submitted to them by the Treasurer and myself on the legal, technical and financial implications of a weekly "carryout" system of refuse collection and after voicing my disapproval of the existing system over so many years it was with a feeling of elation that this report was submitted for the Council's consideration.

The Council gave actailed consideration to the report which cutlined the various alternative collection systems available to them including the paper sack system and also considered the recommendations of The Rural District Councils' Association submitted to the Government Working Party on Refuse Collection. The question of financing such an improved service was obviously of paramount importance and the increased costs that would obviously be incurred was perhaps the crux of the whole matter. Being hesitant to give approval to the implementation of such a system the Council decided to solicit the opinions of the various Parish Councils the majority of whom decided against any change from the existing system unless no increased costs were involved. whether the information submitted by the Parish Councils which actuated the final decision of the Council not to operate such a service reflected the views of the majority of the inhabitants of the district I am in some doubt. I make ne apolegies for expressing this opinion as the refuse collectors and public health staff under my control as well as myself are by the very nature of our employment probably more in touch with the public at large than most other interested parties and we are opposed to this suggestion.

However, there was one compensating feature in the Council's resolution in that they resolved to reconsider the matter in twelve menths time.

It is obvious to me and to those of you who have visited the tips in this area that the amount of refuse handled by the service is considerable that is in relation to the population (5,000 tons per year, estimated). A large part of the bulk of this refuse, if not the weight, should in my opinion never find its way into the refuse container. The Public should be encouraged if this is at all possible to dispose of large amounts of refuse themselves and in this respect the old slogan "Burn your refuse and save your Rates", might well be publicised. Large amounts of paper unsuitable for salvage, vegetable and garden refuse should be burnt or composted with a consequent saving in time and vehicle costs in collection, and economies in tipping space and disposal costs.

The character of refuse has undoubtedly changed over the past few years and is more bulky - packaging of articles has increased enormously with a corresponding increase in the number of voids when placed both in the bin and in the collection vehicle. These facts have obviously influenced the Council's decision to operate compression type refuse freighters.

During the past year there has been a tremendous improvement in the type of refuse containers used for the storage of refuse by the householder but there is still considerable room for improvement in the manner in which such containers are used, and it is not unusual particularly in inclement weather for a workman to receive a cascade of dirty, filthy water down his neck when emptying some bins. Little thought is given to the workmen who carry out this task and I appeal to the public that if it is necessary to place objectionable material in the dustbin then at least wrap it in paper first and keep the lid on the bin. If we are to attract and keep labour for this type of work then their conditions of employment must be made attractive and the paper bag system may well be the solution to this problem. As must be obvious in a kerbside collection the refuse must be collected on fixed days, irrespective of climatic conditions or other inconveniences, and I am pleased to report once again that only on one day during the past fifteen years, apart from Bank Holidays, has the service not been implemented as arranged, even despite appalling read conditions during several hard winters when less arduous forms of employment ceased. workmen rightly deserve consideration and the Council's decision to consider improving the worknens amenity block during 1965 reflects an understanding of this need.

The number of workmen engaged on this service is nine plus the services of the General Foreman being shared with your Surveyor's Department and a J.C.B. driver. In addition to the duties of refuse collection, the drivers' perform routine maintenance tasks on their vehicles weekly; tips are sprayed, as necessary, litter bins on lay-bys are emptied frequently for the County Council on a rechargeable basis, salvage is collected, baled and loaded on transport and since no other labour is available to the Department a variety of other public health functions have to be carried out by them.

Sickness and holidays accounted for roughly one man's services so the staff engaged on actual collection was realty a net figure of eight men. A Work Study Report by Consultants reflected a satisfactory service in this connection.

The Council's refuse collection fleet consists of one Shelvoke and Drewry, 50 cu.yd. Pakamatic, one 30/32 cu.yd. Fore and Aft tipper and one 18 cu.yd. Fore and Aft tipper. An old Karrier side loader was used during the year for ancillary work.

Tips are situated at Thorpe Tilney, Ruskington, Aswarby and North Rauceby, most of which are nearing completion and negotiations were proceeding during the year for the acquisition of several acres of low-lying land in Heckington Fen. The tips have been reasonably well-maintained despite the lack of covering material and the Council utilise the services of a J.C.B. 4C shovel with back acter bucket for tip maintenance. Further control is exercised by spraying with various insecticides and powders during the warmer weather and almost constant rodent control.

The J.C.B. is hired out to contractors at 25s. per hour when not fully engaged by the Department.

The Council's central depot at the rear of the new offices provides reasonable garaging facilities and suitable equipment for routine maintenance and cleansing.

The sale of salvage, particularly of waste paper continues to make a useful contribution towards the cost of this service and the Council's record in this sphere considering its population figures and rural character compares most favourably with any in the Country. Despite restrictions imposed by the Mills in operation at the beginning of the year the tonnage was almost the same as the previous year. The need for more waste paper to assist the national economy became evident at the close of the year and the Department took the opportunity to publicise the need for such salvage and it is anticipated that there will be a substantial increase in tonnage r covered and in income received during 1965 particularly as the Council have entered into a three year contract with the Mills.

The following figures show the amount of waste paper collected and income received since 1940.

YEAR.	TONS.	CVTS.	QRS.	LBS.	£.	s.	d.
1940.	28	6	1	8	120	14	11
1941.	28	5	0	0	132	4	8
1942.	106	9	0	12	670	11	10
1943.	54	10	0	22	348	16	1
1944.	48	4	2	0	307	8	9
1945.	27	7	2	0	174	10	6
1946.	58	12	0	0	371	10	6
1947.	41	1	0	0	261	13	11
1948.	73	14	2	0	475	1	9
1949.	71	19	0	0	431	0	1
1950.	74	14	2	0	441	11	9
1951.	132	12	0	0	2169	12	7
1952.	121	2	3	0	1360	2	5 1
1953.	126	15	0	0	892	19	1
1954.	164	17	3	0	1214	4	1
1955.	199	12	1	0	1742	11	10
1956.	192	150	2	0	1556	14	7
1957.	165	15	0	0	1327	9	0
1958.	202	9	0	0	1583	3	10
1959.	206	14	2	0	1540	8	7
1960.	243	19	0	0	1843	7	3
1961.	279	19	1	0	2362	O	4
1962.	281	19	1	0	2254	0	3
1963.	296	18	1	0	2601	15	9
1964.	283	11	1	0	2408	4	5
Totals.	3,512	4	1	1	£2 8598	18 ⁻	9

£46 was received from the sale of other salvageable materials during the year.

				, A	, E		
Wil 677 - 50 cu. yd. Pakamatic		Parish.	Hillside Estate, Ruskington Fen, Billinghey and Fen.	Scredington, Aswarby, Crofton, Aunsby, Dembleby, Swarby, Culverthorge.	Silk Willoughby, Spanby, Threekingham, Osbournby, Scot Willoughby, Haceby, Newton, Walcot F, Stow.	Ruskington.	Blankney, Scopwick, Kirkby Green, Rowston, Digby Camp.
	Weck.	Day.	Monday,	Tuesdiy,	Wednesday.	Thursday.	Friday,
	First Weck.	Parish.	Hockington, Burton Podwirdino.	Clear dry - paper baling etc.	Lessingham, Cranwell, Byard's Loap, Roxholm, Brauncowell, Temple Bruer.	Anwick, North and South Kyme and Fens.	Martin, Timberland, Digby Fen, Walcot B, Thorpe Tilney.
101		Day.	Monday	Tuesday.	Wednesdry.	Thursday	Friday.

	$\overline{ ext{Parish}}$.	Hillside Estate, Ruskington Fen, Billinghay and Fen.	Clour day - parer baling etc.	South and North Rauceby, Wilsford, Kelby, Byard's Leap.	Kirkby la Thorpe, Evedon, Heverholme, Ewerby and Thorpe, Howell, Asgarby, Great Hale and Fen.	Digby, Bloxholme, Ashby de 1. Leunde, Dorrington, Digby Comp.
Wook,	Day.	Monday.	Tuesday.	Wednesdry.	Thursday	Friday
Second Week,	Parish.	Heckington, East Heckington.	Helpringham, Swaton, Little Hale and Fens.	Billinghey Dales, Tattershall Bridge, Chapel Hill, Thorpe Tilney Fon, Timberland Fen, Martin Dales, Blankney Fen.	Ruskington.	Thorpe Tilney, Digby Fon and part Digby Village,
	Day	Monday.	Tuesday.	Wednesday.	Thursday.	Friday

The following is an abstract from the accounts of the Treasurer showing the net cost of the service for the year ended 31st March, 1965.

EXPENDITURE.

EMPLOYEES.		
	€.	£.
Wages.	7,021	
National Insurance and Graduated Pensions.	322	
Superannuation.	315	7,658
RUNNING EXPENSES.		
Maintenance of tips.	1,153	
Rents and Rates of tips.	11	
Proportion of Foreman's Expenses.	400	
Proportion of Depot Expenses. Paper Baling Plant.	782 160	
Protective Clothing.	72	
Petrol and Fuel Oil.	537	
Road Fund and Driving Licences.	505	
Insurance of Vehicles.	75	
Repairs and Maintenance of Vehicles. Health Department Administrative	439	
Charges.	928	
Miscellaneous Expenses.	39	5,101
LOAN CHARGES.		1,409
		£14,168
INCOME.		
SALES OF SALVAGE.		
Paper.	2,408	
Other Materials.	46	2,454
	40	~y 1/2 1
HIRE OF VEHICLES.	40	
HIRE OF VEHICLES. Profit from hire of Hydra Digga.	40	58
Profit from hire of Hydra Digga.	40	58
Profit from hire of Hydra Digga. MISCELLANEOUS.	40	58 216
Profit from hire of Hydra Digga.	40	58
Profit from hire of Hydra Digga. MISCELLANEOUS.	40	58 216

Approximately 6,400 premises are serviced in the area and the net annual cost per premises clearance is approximately £1-15-9d. 235,560 individual premises were visited during the year and the average net cost per visit per property was approximately 10d. (The above figures provide for both collection and disposal).

The cesspool emptying service was instituted in 1951 and it has proved to be a most welcome and efficient service, there being no private contractors available in the area to perform this work which continues to increase. This work is carried out by a Karrier/Yorkshire 800 gallon cesspool emptier and a 1,000 gallon combined gully/cesspool emptier. Four workmen are employed in connection with this work. In 1961 the Council decided to operate a rate-aided service in respect of the initial emptying of tanks at privately occupied houses and to charge 25/- per hour in respect of subsequent emptyings. Business, agricultural and industrial services would be subject to a similar charge. The following statistics will show that whilst private work has increased substantially over the past few years, the Council commitments have shown a corresponding decrease. This is not necessarily because the number of tanks have substantially been decreased, but because the number of emptyings per year have been drastically reduced. Your Surveyor and I are not in agreement over this policy and I am sure that with the continued pressure from the Fisheries and Pollution Officer, more frequent emptyings may be required in future to alleviate the problems of pollution.

During 1964 the following work was carried out by these machines:-

	Private	Council	Rate-Aided
Septic tanks.	357	132	920
Vaults	17	 ,	202
Drains cleared and flushed.	128	37	
Sewers.	2	68	***
Wells.	1	essign	and a
Pump sumps.	6	2	
Manholes.	1	40M	
Disposal Plants.	3	21	1
Grease Traps.	35	eco	
Sedimentation Tanks.	1	. 2	
Testing Tanks.		_	cure.
Pipe Trenches.		1	
Drying Beds.		1	
Draining sludge from			
stream.	7		~
Rodding & testing drainage to sever.		1	
Gullies flushed.	6.3	1	_
Sockaways.	1		
Sewer dykes.		2 ,	
	-		
TOTALS.	553	268	1,123

In addition gully emptying was performed on behalf of Sleaford Urban District Council and Kesteven County Council four times per year at a charge of 2/6d. per gully per emptying.

	No. of gullies emptiod	No. of enptyings	-	arges ade	
Sleaford U.D.C.	233	4	£116	10s.	Od.
Kestoven C.C.	1,258	4	£629	Os.	Od.

5,964 gullies emptied and £745 10s. Od. charged for this service.

The disposal of effluent, particularly in inclement weather, is a constant headache to the Department's Officers and workmen as less agricultural land is available for this purpose, than was the case ten years ago. Farmers are reluctant to receive same on their land and owing to the possibility of infecting cattle with 'Cysticercus Bovis', grassland is rarely available. In any case, disposal of this material on agricultural land is not satisfactory either from a public health or aesthetic point of view. Other more suitable methods of disposal will have to be found and this will no doubt prove to be expensive. Your Surveyor was instructed to make enquiries into the cost of providing suitable disposal works for this material.

The solution to this problem is becoming urgent and my frequent warnings in this respect cannot be treated lightly. The difficulty of finding suitable disposal points necessitates increased mileage in transportation. In actual fact 3,092 loads (1,942,494 gallons) of effluent were disposed of during the year at an average mileage of 7.3 miles per load.

Table I shows the statistics in relation to this service since 1960 which will substantiate my point.

Table II shows the charges made in respect of private and Council servicing and what would have been charged if rate-aided service was in fact rechargeable at 25/- per hour.

The following is an abstract from the accounts of the Treasurer showing the net cost of the service for the year ended 31st March, 1965:-

Expenditure.

	Employees.	£.	€.
	Wages.	2,412	
	National Insurance and Graduated Pensions.	110	
	Superannuation.	99	0.601
			2,621
	Running Expenses.		
	Proportion of Depot Expenses.	158	
	Equipment and Tools.	24	
	Protective Clothing.	26	
	Fuel, oil and petrol. Road Fund and Driving Licences.	451 66	
	Insurance of Vehicles.	30	
	Repairs and Maintenance of	30	
	Vehicles.	665	
	Health Department		
	Administrative Charges.	720 8	0 110
	Miscellaneous.	0	2,148
			4,769
			parameter and the parameter of the contract of
Inco	ne.		
	Charges for Service.		
	Use by Priv te Persons.	1,535	
	Charged to other Council	730	2 274
	Services.	739	2,274
			2,274
			*ACOR ARREST RECORDS (ACORDS AND ACORDS AND
	NET COST OF SERVICE.		2,495
	- 58 -		

TABLE 1.							A STATE OF THE STA	A COMPANY OF THE PERSON OF THE	and the second s					
	PRIVAT	PRIVATE/RECHARGEABLE	RGEVBLE	WORK		8	COUNCIL WORK	NORK		표]	TE-AII	RATE-AIDED SERVICE	VICE	
	1960 1961	1* 1962		1964	1960	1961	1962	1963	1964	1960	1961	1962	1963	1964
Septic tanks.	(1)	2	246	357	434	297	(')	159	132	1	453	582	809	920
Vaults.		69 51	24	17	1	<u>~</u>	1	1	1	1	164	159	229	202
Sewers traced.	1		1	1	1	0		1	1 1 2	1		1	ę	1
Drains etc. traced and flushed.	100	75 137	174	158	45	43		36	37	1	_	-	N	1
Sewers flushod.		•	1	2	106	121	_	51	89	1	-	1	1	1
Woter cisterns,	~	1	1	1	1	ŧ		1	i	ì	ı	1	1	1
Cellars empticd.	<u></u>		i	1	ı	1		1	1	1	1	1	1	1
Volis.	1		2		1	1		1	1	1	1	ŧ	1	1
Fund Sumps.	2	3 6	2	9	ı	~		2	N	1	ę	1	1	1
Ponds drained.	1		i	\$	ı	1		1	i	1	1	1	1	1
Sower dykes flushed.	1	1	1	1	~	5		~	~	1	í	1	1	1
Manholes flushed.	1	1	ŧ	_	2	1		1	era era	1	1	1	1	1
Disposal Plants.	i		\sim	\sim	31	100		15	21	1	1			
Refuse Tips Sprayed.	9	1	i	1	<u></u>	1		et partie	1	1	1	1	1	1
Sludge Lagoons.	1	14 2	1	1	1	1		1	1	:	ì	1	1	1
Weighbridge Sumps.	1		~	1	5	ŧ		1	1	1	1	1	1	1
Crowy :rds.	i			ŧ	1	1		i	9	1	1	1	1	1
Grense traps.				35	0	1	1	ę	1	1	1	1	ì	1
Sedimentation tanks.	t	8 17		~	1	ę	1	1	ŧ	1	1	1	appear	1
Sheep dips.	etta	4 5		1	1	i	1	1	ı	1	1	1	1	1
Catchpits.	200		·	1	1	1	ŧ	6129	1	1	1	1	5	1
Inspection chambers.	1	,	1	1	ert ₀	ş	~	1	1	1	ı	ï	W	1
Filters.	1		1	1	1	1	1	1	ŧ	1	1	1	1	i
Silage Pits.	1	1		1	ŧ	1	1	1	1	1	1	1	1	1
Testing Tanks.	1		ŧ	1	1	1	1	1	N	1	1	1	1	1
Pipe trenches.	ı	1	1	1	1	1	1	1		1	1	1	E	1
Drying beds.	1	1	1	1	1	1	1	1	~	1	1	1	1	1
Draining sludge from stream.	1	1	1	<u></u>	10.	1	1	ŧ	1	1	1	1	1	1
Rodding & testing drainage to sewer.	1	1	ŧ	1	1	1	1	1	-	1	i	1	1	1
Pumping water from sewar trench.	1	}	1	1	1	ŧ	1	~	1	1	1	i	1	1
Gullies flushed,	1	1	1	1	ı	1	1	~	-	1	ŧ	i	1	1
Sockeways.	1	1	~		1	1	1	1	1	1	1	1	1	1
		Annual offered Company of the										STORY OF THE PERSON NAMED IN		

* RATE-AIDED SERVICE COME ENCED.

TO SHOOT SHOULD BE SHOULD	Control of the Contro	PARTY OF THE PROPERTY OF THE PARTY OF THE PA	Apple LANGE OF THE PARTY		Application of the state of the		STORY CHARGE CONTRACTOR	A SECURITY OF THE PERSON NAMED IN COLUMN NAMED	or deliging to the second	COST & SCHOOL SECTION SECTION			
YEV.R.	TOTAL EFFLUENT DISPOSED OF MAINLY ON GAICULTURAL LANDS,	, in the second	PRIVATE.	្មាំ		COUNCIL		RAL	R.TE-AIDED.	Œ.	The control of the co	TOTAL.	
		CHŞ	ŭ	ਰ	લાઇ	Ω̈́	ģ	CHS	ď	ਹੈ	વારે	ω	ರೆ
1960	2,702,000	1,333	16	0	1,500	9	٣		2		2,834	N	\sim
1961	1,842,600	523	10	\sim	1,045	12	9	1,032	16	\sim	2,601	<u>C</u>	0
1962	2,174,078	782		\sim	1,264	_	9	1,215	ω	4	3,262	2	<u></u>
1963	1,886,246	822	7	0	738	တ	6	1,392	~	∞	2,952	7	77
1964	1,942,494	841	77	\sim	714		\sim	1,447	16	\sim	3,003	2	C)

RODENT CONTROL.

The Department employs two rodent operators, who carry out their duties conscientiously and efficiently. It undertakes the treatment of domestic premises free of charge and is available to treat infestations of business and agricultural premises etc. on a rechargoable basis. Poison bait (Warfarin) is also sold at 1/6d. per lb.

Considerable publicity by circular letters to all land owners and occupiors, posters and press have been effected during the year. The customary film show and brains trust was not held owing to pressure of other work, but it is hoped to continue such publicity in future years. The co-operation of the agricultural population in particular is increasing year by year and the Department carry out a consider ble amount of treatment work in this sphere on a rechargeable basis. In this respect, it is a pity that financial control does not permit the Department to contract for this work. If we were permitted to do so I am sure that we should have a considerable amount of such work, and on the whole, I am sure we would make it pay, but probably what is more important from a public health point of view, we should enhance our control over such infestations.

The following is an abstract from the accounts of the Treasurer showing the net cost of the service for the year ended 31st March, 1965:-

Expenditure.

Employees.	€	€
Wages National Insurance and	1,348	
Graduated Pensions. Superannuation.	67 68	
Travelling Allowances.	372	1,855
Running Expenses		
Baits and Poisons. Proportion of Depot Expenses. Central Depot Charges. Rent Contribution.	572 25 529	
Miscellaneous Expenses,	29 7	1,162
		3,017
Income.		
Charges for Service.		
By Private Persons. Charged to other Council Services.	1,141 371	1,512
		1,512
Net Cost of Service.		1,505

In addition all sewers and a considerable number of sewer dykes were inspected, test baited and treated as required. Most sewers were infested to some minor degree, but there were relatively few major infestations in such sewers. Refuse tips are visited at least weekly and infest tions on such premises are speedily controlled.

Action under the Threshing and Dismantling of Ricks Regulations does not give rise to as much concern as a few years ago, owing to increasing use of combine harvesters and drying plants. It was however necessary to discipline several contractors during the year for non-compliance with this legislation.

The following figures show the extent of infestations of rats and mice observed by your operators during the year 1964, and the measures of control taken by the Local Authority:-

	ga namanan amin'ny anjah amin'ny amin'ny anjan'ny anjan'ny anjan'ny ananana amin'ny anjan'ny anjan'ny anjan'ny		TYE	E OF PROPER	M	
			IJon	-Acricultur	7,1	
		(1) Local Authority	(2) Dwelling Houses (inc. Council Houses).	1 .		(5) Agricultural
I.	Number of properties in Local Authority's District	33	6,517	1,030	7,580	1,336
II.	Number of properties inspected as a result of (a) Notification	33	336	42	411	233
	(b) Survey under the Act	quan	945	28	973	78
III.	Total inspections carried out - including re-inspections.	608	2,104	390	3,102	2,029
IV.	Number of properties inspected (in Sect. II) which were found to be infested by:		omen mental and the second and the s		en emberende oberer protes	
	(Major (Major (Miner	14	19	9	42	134
	(AINOF	19	454 17	21	494 26	187 47
	(b) Mice (Minor	place parts and a second part of the second parts of the second pa	70	21	91	84
V.	Number of infested properties (in Sect. IV) treated by the L.A.	33	583	41	657	192
VI.	Total treatments carried out - including re-treatments (To be completed only if figures are readily available).	409	749	146	1,303	1,303
VII.	Number of notices served under Section 4 of the Act: (a) Treatment	-		4.	4	18
	(b) Structural Work (i.e. Proofing).	-		6	6	5
VIII.	Number of cases in which default action was taken following the issue of a notice under Sect. 4 of the Act.	dost			475	gant.
IX.	Legal Proceedings.	-	-		dentil	
Х,	Number of "Block" control schemes carried out.			31		

INSPECTION AND SUPERVISION OF FOOD.

Meat Inspection.

I am pleased to be able to report that once again a 100% inspection of all animals to which notice of intention to slaughter for human consumption was given - this record has been maintained since de-control in 1954. There are, however, only two private licensed slaughterhouses in the district compared with seven in 1954. The proper implementation of the Slaughterhouses Act, 1958, and the Hygiene and Cruelty Regulations resulting in the closing of the remainder. Hours of slaughtering, however, are not adequately controlled by legislation and your Inspectors are still called upon to carry out meat inspections outside normal office hours and at weekends.

Continual pressure was necessary to maintain these establishments up to a satisfactory standard of hygiene. Bad habits formed over the years are hard to break and carelessness due to thoughtlessness and inadequate instruction in hygiene are the principle obstacles to good practice. Frequent inspections are made with Ministry Veterinary Officers to maintain a reasonable standard of construction and hygiene.

Butchers in the Rural District not being licensees of slaughterhouses in the area make use of the slaughtering facilities in the Sleaford U.D.C. area.

Occasional inspections of meat have been carried out at the Sleaford Slaughterhouse on request by Sleaford U.D.C.

Meat condemned at the slaughterhouses during the year totalled 6 cwts. 2 qrs. 17 lbs. The number of animals slaughtered continues to decrease as does the amount of meat condemned. Tuberculosis is now rare in cattle due to the Government's successful eradication policy; the disease still persists in pigs to a lesser extent. It is interesting to note that meat animals also suffer from the hazards of traffic accidents, one pig's head and shoulder being condemned following slaughter after injury involving collision with a car.

The following tables show the statistics in relation to meat inspection in the rural area: -

Carcases or offal inspected and condemned in whole or in part - 1964.

	Cattle excluding Cows	Cows	Calves	Sheep and Lambs	Figs	Horses
Number killed.	141	-	1	3 26	300	-
Number inspected.	141	-	1	326	300	-
All diseases except tuberculosis and cysticerci. Whole carcases condemned.	-		_	1		-
Carcases of which some part or organ was condemned.	34	! _	1	1	69	-
Percentage of the number inspected affected with disease other than tuberculosis and cysticerci.	24.11	· ·	100	9.31	23.00	-
Tuberculosis only: - Whole carcases condemned.	-	-		_	-	-
Carcases of which some part or organ was condemned.		· -	-	_	10	_
Percentage of the number inspected affected with tuberculosis.	-	-	-	-	3%	-
Cysticercus bovis:-	-	_	-	_	-	-
Carcases of which some part or organ was condemned.	1	-	-	-	-	-
Carcases submitted for treatment by refrigeration.	-	-	_	_	! 	-
Percentage of the number inspected affected with cysticercus bovis.	0.70	-	-	-	-	_

As a result of such inspections the following unsound meat was voluntarily destroyed or diverted to uses other than for human consumption, most of this was as a result of localised conditions such as abscesses, pleurisy and parasites:-

1 sheep carcase and all offal. Sheeps head.

Calf liver, lungs and kidneys.

- 31 sets pig lungs.
- 8 sets pigs lungs.
- 5 pig hearts.
- 5 pig plucks.
- 1 pig mesenteric fat
- 1 pig pluck, part ribs and trimmings. Lung tumcur.

Pork trimmings.

Pork trimmings.

Perk trimmings.

Pigs head and shoulder.

3 pig hocks.

Part flank of pork.

Half sows udder.

17 pig livers.

- Generalised septicaemia.
- Ceonurus cerebralis.
- Congestion.
- Pneumonia.
- Pleurisy.
- Pericarditis.
- Pleurisy, pericarditis and peritonitis.
- Peritonitis.
- Cyst.
- Urticaria.
- Injury.
- Injury car accident.
- Arthritis.
- Abscess.
- Mastitis.
- Ascaris lumbricoides.

3 pig mesenteric fats.	- Localised tuberculosis.
8 pig heads.	- Localised tuberculosis.
4 beast livers.	- Cirrhesis.
17 part beast livers.	- Cirrhosis.
5 beast livers.	- Abscesses.
1 part beast liver.	- Abscesses.
7 beast lungs.	- Parasitic.
1 beast lungs.	- Pleurisy.
1 beast heart.	- Pericarditis.
2 beast spleens.	- Contamination.
2 beast heads and tongues.	- Actine bacillesis.
1 heast head and tongue.	- Degenerated cysticercus

bovis.
Abscess.

Total weight condemned 6 cwts. 2 qrs. 17 lbs.

Meat Condemned and Voluntary Surrendered.

1 beast thin skirt.

	1954.		1	ten.	1	cwt.	2	qrs.	8	lbs.	(Part	year).
	1955.		2	ton.	2	cwt.	2	qrs.	18	lbs.		
	1956.		2	ton.	15	cwt.	3	qrs.	7	lbs.		
	1957.		1	ton.	13	cwt.	3	qrs.	3	lbs.		
	1958.		1	ton.	10	cwt.	1	qrs.	22	lbs.		
	1959.		1	ton.	9	cwt.	2	qrs.	19	lbs.		
	1960.		1	ton.	3	cwt.	1	qrs.	10	lbs.		
	1961.				19	cwt.	1	qrs.	24	lbs.		
٠.,	1962.	***			11	cwt.	1	qrs.	11	lbs.		
	1963.				7	cwt.	1	qrs.	14	lbs.		
	1964.				6	cwt.	2	qrs.	17	lbs.		

Slaughter of Animals Act, 1954.

This Act provides for the issue of licences to slaughtermen and any issued are required to specify:-

- (a) the kinds of animals which may be slaughtered or stunned by the holder, and
- (b) the types of instrument which may be used by him for that purpose.

The Council have not issued any licenses for the slaughter of horses. They have restricted slaughtermen to and have specified the use of a mechanically operated captive bolt type of slaughtering instrument for all animals.

There are five licenses operative authorising the slaughter of all meat animals except equines compared with twenty-three in 1954.

Condemned meat and inedible offal from slaughterhouses and butchers shepsare regularly collected by two by-products manufacturers for conversion into animal feeding stuffs and fertilisers.

Meat Inspection Since De-centrel on 7th July, 1954.

	No. of An					
Year	Cattle excluding cows	Cows	Calves	Sheep and Lambs	Pigs	No. of separate visits for Inspection
1954 1955 1956 1957 1958 1959 1960 1961 1962 1963 1964	185 435 488 440 332 264 281 483 168 180 141	19 11 29 31 16 4 2	2 5 3 2 1 2 - goats	729 1489 1049 949 750 813 612 1127 301 369 326	362 1149 1278 1148 1235 890 916 1199 396 308 300	295 660 544 538 516 370 319 387 163 158

The maximum charges for meat inspection as laid down in the Meat Inspection Regulations, 1963, were charged for such inspections, as follows:-

In the case of each horse or bovine animal other than a calf.

In the case of each calf or pig.

In the case of each sheep, lamb or goat.

and realised £37-1-3d. during the year.

The mileage involved in respect of these inspections incurred considerably more expense than the income received. At the end of the year, however, the Council were considering reducing or waiving altogether such charges.

Other Food Inspections: -

The following focdstuffs were examined on request, found unfit for human consumption, were voluntarily surrendered and disposed of:-

246 lbs. beef.
28 lbs. lard.
2713 lbs. pcrk.
10 lbs. apricot pulp.
28 lbs. liquid egg.
3 x 28 lbs. frozen whole hen eggs.
6 lbs. sliced apples.
7 lbs. blackberries.
5 barrels apple puree.
160 lbs. mixed meat.
14 lbs. canned ham.
2 lbs. corned beef.
36 lbs. bacon.
6 x 6 lbs. 3 czs. tins apples.

During the Aberdeen Typhoid outbreak when frequent visits were aid to retailers, etc., 10 x 6 lbs. tins of corned beef were withdrawn from sale from a Ruskington retailer. After some correspondence with the Ministry of Health these were eventually returned to the retailer for return to the wholesaler.

Licensed Houses, Restaurants and Catering Establishments.

Inspections were made of all the above types of food premises as often as was possible throughout the year. Generally, they were maintained in a reasonable condition and usually complied with the basic structural conditions of the Food Hygiene Regulations.

Numerous infringoments were noted however and continual pressure was exercised to raise and improve the standards and effect necessary improvements. So far as structural defects at licensed houses are concerned considerable improvements have been effected at such premises without recourse to formal action by persuasion and in this respect I report twice yearly to the Licensing Justices on the defects observed and the improvements carried out.

The constant need for careful personal habits and cleanliness and protection of food stuffs from all forms of contaminants was continually expressed and emphasised. This most important facet of food hygiene is, unfortunately, the most nebulous to control. The visiting Inspector can ensure easily cleaned, structurally hygienic premises. He cannot, however, be constanty present to ensure that the human factor exercises constant vigilance over himself or the food he deals with. This can only be done by health education.

For many years it has been my contention that sanitary conveniences, fitted with washing accommodation for patrons, should be placed under cover within the building itself. Thus, patrons will be protected from inclement weather and management control should be made easier. It is pleasing to note that a slow trend is moving in this direction. However, provision of washing facilities voluntarily, in such places is still rare.

The catering establishments and restaurants other than licensed premises, are relatively few and cater, in the main, for the motorist, transport driver and fisherman.

No serious breaches of the Regulations were observed but a constant vigilance is essential at these premises in order that standards are maintained at an acceptable level. In one instance a rapid deterioration in standards occurred through mis-management. Informal action failed to raise a response and legal proceedings were started. Before the case was presented, however, the premises voluntarily closed and have remained out of business.

Butchers Shops.

There are eleven butchers shops in the district most of them structurally satisfactory and fitted with a reasonable standard of equipment. In few cases, however, it was necessary to draw the attention of the proprietors to the need for protecting joints and carcase meat against contamination by the customer. There is no doubt that the vendor will continue to display his wares and in particular with the smaller premises some screening or protection against the customer is essential. These contraventions of good practice have been brought to the attention of the butchers concerned but progress in this direction has been slow and they may have to be more forcibly reminded of their obligations in this respect.

Food Premises Catering Infrequently.

During the past year, efforts were made to inspect all premises known or suspected to be engaged in occasional food catering activities. This "Blanketing" campaign necessitated inspection of such premises as Church and Village Halls, Non-Conformist Church Rooms, Tennis and Sports Clubs and similar organisations.

In some Villages, these types of premises can be centres of activity although their importance and influence is stoodily waning. The premises will often accommodate a variety of organisations including Womens' Meetings, Womens' Institutes, Village Socials, Youth Organisations and the occasional Wedding Reception. Inevitably at many of these Meetings food will be prepared and sold for immediate consumption.

Generally, the standards of hygiene at such premises were found to be low with a few praiseworthy exceptions.

The facilities available were usually inadequate, difficult to keep clean or non-existent. Elementary rules of hygiene such as hand washing in heated water or even the opportunity to wash hands at all must often be ignored since there was usually no wash basin and on the rare occasions when a wash basin could be found, there was no provision made for heated water and no nailbrush, scap or towel. Facilities for preparing foods and cutting up were usually primitive with serious danger of contamination from unsuitable surfaces. Decoration and washing focilities were very poor and kitchens were often used as general lumber rooms.

The question of Non-Conformist Church Rooms raised a slightly different problem to other premises. Catering here is usually on a much smaller scale i.e. tea and buns at Social Meetings, etc. with only annual "Harvest Home" type suppers and the rare Wedding Reception when more organised catering is required.

Food preparing facilities, in such places, together with handwashing and equipment cleansing and toilet facilities were found to be badly neglected. Often, such facilities comprised a cold water tap with the occasional refinement of a sink. These total facilities were housed in such widely diversified places as the Minister's vestry and the cutside fuel store. Toilet facilities were, if provided, usually pan or vault closets. It will be obvious that in the majority of Churches, the existing conditions will militate strongly against the clean handling of foodstuffs. I appreciate that funds for this type of work in a Church will not be easy to find and this fact alone will deter the Reformer notwithstanding the hesitation one will feel in backing the stand for food hygiene against a Church. Allowances can be made in this respect but the necessary works should be effected ultimately. Funds can be found and made available and the efforts made in this respect will be of unquestioned benefit to Church Members.

The scope of the contraventions found in Church/Village Halls, Non-Conformist Churches and similar institutions can be assessed from the following table:-

Reg.	Contravention.	Total
5	Premises considered unsuitable by reason of their situation, construction or condition.	29
. 6	Articles of equipment which were either unclean, could not be readily cleansed or presented a risk of contamination to foodstuffs.	26
14	Sanitary conveniences which were either not clean, not in good order, connected directly with a kitchen or missing altogether.	59
15	No water supply.	3
16	Absence of wash-hand basin, missing scap, towel or nailbrush or lack of hot water supply to the basin.	31
17	No first aid materials.	43
18	Inadequate accommodation for outdoor clothing.	21
19	Lack of sink, no hot water supply to sink, lack of suitable detergents.	33
20	Inadequate lighting to foodroom.	3
21	Inadequate ventilation to foodroom.	2
23	Premises not cleaned, difficult to keep clean or in poor repair.	75
24	Accumulation of refuse or filth in a foodroom.	17
	TOTAL.	342

Number of premises inspected - 63.

The response of Management Committees of the various premises was largely encouraging. Various schemes of improvement have been put in hand or proposed with the full co-operation of this Department. Indeed, I have the impression that some Committees have embarked on projects with enthusiasm and wondered why improvements have not been done previously.

Food Hygiene Related to Open Air Events.

Open air events, Village Shows and Agricultural Meetings are frequently held, over a Summer weekend, in the area. Commonly, some type of catering provision is made usually in the form of stalls and moveable vans.

These Meetings were visited on every occasion and gradual improvements were noted latterly.

It is obvious, however, that the customer is too willing to accept lower standards of hygiene at such times than he would normally expect from established premises. It may be that the open air adds relish to a snack not found at other times. At such premises, a very real hazard to health could occur perhaps greater than elsewhere.

Populations at these events can range from 2,000 upwards. A population of 10,000 is not unusual - representing as they do a cross section of scattered towns and villages throughout the Country. An outbreak of food poisoning organisms could hit an extensive area simultaneously. Aberdeen's typhoid outbreak was swiftly contained. One food handler as disadvantageously placed (from a public health viewpoint) at a large popular open air event, being a disease carrier and taking no precautions in hygiene from one cause or another could create havoc on a very large scale. To spot a food poisoning organism carrier, macroscopically in food handlers is an impossibility. To break a possible chain of infection we must ensure that the food handler has adequate and hygienic premises - proper toilet facilities and every opportunity to cleanse himself in hot water. Apparently elementary procedure but difficult to ensure practically. only provide and ensure provision of facilities and trust to education and natural fastidiousness.

Registration of Food Premises.

The number of premises used in connection with the manufacture or sale of ice cream, preserved foods, etc. and registered in accordance with section 16 of the Food & Drugs Act, 1955, are as follows:-

Preparation or manufacture of sausages,	
potted meats, etc.	15
Fish frying premises.	9
Ice cream manufacturers.	1
Ice cream vendors.	42

The periodic inspections of all the above premises were carried out during the year. Again satisfactory premises were occasionally nullified by unsatisfactory handling and care of products through thoughtlessness, ignorance, bad habits or plain laziness.

Food Premises - General.

The number and types of food premises in the district are as follows:-

Butchers.	14
Grccers and Provisioners.	'65
Cafes, Snack Bars, etc.	10
Hotels, Inns, Guest Houses, etc.	41.
Greengrocers.	4
Bakers and Confectioners.	10
Fishmongers.	-
Fried Fish Shops.	10
Prepared Food Factory.	1
Poultry Dressing Factory.	1
Poultry Dressing Premises.	2
Ice Cream, Minerals and Sweets.	19
Seasonal Kiosks.	12
Chemists.	3
Works Canteens.	3
School Canteens.	34
Church/Village Halls, Non-Conformist	·
Church Rooms, etc.	63
Total.	292

The above figures have been tabulated according to the principal trade engaged in. The trend in most retailers has tended to widen rather than clear-cut specialisation in types of merchandise offered for sale. Recourse to legal action was not found necessary during the year. One premises ceased business abruptly when legal proceedings were mooted but usually warning letters had the necessary effect.

I append below details of contraventions found at such premises during the course of the year. The figures do not include contraventions found at premises catering infrequently. A table of such details is available on page 68 of this Report.

Nature of Contravention.	Found	Remedied
Lack of suitable sinks.	38	4
Lack of wash-hand basins.	25.	2
Lack of hot water supply.	38	8
Lack of cold water supply.	7	_
Lack of towels, soap, nailbrush.	31	3
Unclean towels, etc.	5	-
Inadequate or unsuitable closets/urinals.	25	8
Defective closets/urinals.	11	23
Unclean closets.	4	-
No ventilated space between closet and		
foodrooms.	4	1
Defective drainage.	20	3
Insanitary foodstores (condemned).	4	1
Unclean foodstores.	51	3
Defects in fcodstores.	170	52
Lack of flyproofing.	20	5
Inadequate ventilation.	2	-
Inadequate lighting.	3	1
Unsuitable display of food and food on		1
floors.	31	7
Food placed on or near ground not		
adequately protected.	3	2
Animals in foodrooms.	7	-
Rodent infestation in foodrooms.	8	2
No protection against birds etc.	4	-
Unsuitable equipment.	35	9
! Smoking in feedreems.	11	4

Nature of Contravention.	Found	Remedied
No notices to "wash your hands" after using the W.C. Unclean clothing. No separate accommodation or locker for outer clothing, footwear, etc. No first aid equipment. Uncovered cuts and wounds. Use of newspaper in contact with food. Refuse accumulations in foodstores. Unclean vehicles. Lack of name and address on vehicle.	51 7 15 47 2 5 11 6	15 - 3 5 1 - 1

Food Factories.

There is one large food factory in the area (poultry evisceration and packing) and two smaller ones (meat pie products, etc. and beet preparation).

One factory produces prepared food products (sausages, meat pies, fruit pies and prepared meat products, etc.). The other factory deals mainly in poultry slaughter, preparation and packing and has an exceptionally high throughput. Both factories are well established and enjoy a good reputation.

Frequent visits have been made throughout the year to both these concerns by your inspectorate. The closest co-operation has continued between the management of these concerns and this Department. Both factories are reasonably well equipped to produce a hygienic product and every effort is made to maintain a good standard of hygiene.

So far as the poultry packing establishment is concerned after humble beginnings and serious public health problems associated with the disposal of waste matters produced as development proceeded, it is now considered to be one of the most up-to-date establishments in the Country.

Samples of chicken hearts and livers are regularly sent for bactericlegical examination and during 1964, 780 samples were submitted and in no case was salmonella or shigella isolated. In-plant chlorination is practised and I am sure provides an additional safeguard against cross contamination.

Similarly with regard to the meat factory, whilst it was necessary to draw the attention of the management to various structural matters, samples of meat products showed no infection with salmonella or shigella and total counts proved reasonably satisfactory.

In an age of full employment, however, these establishments cannot be as discerning as they would like and the type of employees sometimes employed are not of the best for this type of work and it is for this reason that constant supervision and education of the food handler must be practised.

School Canteens.

The County Health Inspector gives particular attention to these premises and through the County Medical Officer of Health has set a high standard in securing improvements and a measure of uniformity throughout the whole county. Occasional visits are made to such premises by your staff and the County Inspector keeps this Department fully informed as to any action he may recommend for Schools in this area.

Food Hygiene Propaganda.

Opportunities for food hygiene propaganda and instruction have been readily taken whenever offered.

Use has been made of leaflets and posters wherever possible. Lectures were given to school children.

The local press have again proved most helpful in this respect and I have no doubt that their accurate reporting, campaigning, comments and resultant publicity have greatly aided this branch of our work. For this helpful co-operation I am most grateful.

The best opportunities rest, I feel, with the visiting Inspector. By personal contact he can discuss, explain and enlarge upon food hygiene matters. In this respect, much depends upon the individual Inspector's natural ability and to a lesser degree, his training to present the case tactfully, persuasively and logically. Therever possible the co-operation of the food handler has been sought. Occasionally, however, such co-operation will not be forthcoming. In such cases I would not hesitate to recommend the full recourse of legal action.

There were no film shows or brains trusts held during the year. This is a very useful means of presenting the cause of clean food and use will again be made of this mode of information. Although I am afraid that previous experience confirms that in such matters we are preaching to the converted.

I would suggest that use could be made of a recognised course of education for food handlers - probably under the aegis of the education authority. Such a course could lead to a recognised certificate in food hygiene - for example the examination in Food Hygiene of the Royal Society for the Promotion of Health or The Royal Institute of Public Health and Hygiene but the widely scattered area and difficulties of transport may deter such interest on the part of young food handlers.

Food Hygiene (General).

The past year has shown a steady improvement in the standards of food hygiene as laid down in the relevant legislation. An effort has been made to extend food hygiene and control coverage as far as possible. Much remains to be accomplished in this field and constant persistent vigilance will be exercised.

I have constantly emphasised this service to the public and endeavoured to gain as much support and publicity to the basic tenets of food hygiene as is possible in order that the right people will hear the message. The local press have been very helpful in this respect.

I aim at the fccd handler to take the utnest care of the product in which he deals - that he behaves as seemly beyond the public eye as before it. I ask that he is constantly aware that the well being of his customers rests very largely in his hands.

I aim at those in charge to constantly bear in mind that good hygiene counts and in fact with a discerning public, good hygiene can be good business.

Finally, I aim at the general public reputedly lcn, suffering and phlegmatic. I would suggest they adopt a more vitriclic temperament; if poor hygienic practices offend - complain - to the food handler, the manager and also to the Health Department.

A genuine complaint to me will be thoroughly investigated and in conclusion to all sections I repeat what I and many others have said so many times before "NOW WASH YOUR HANDS" particularly after using the toilet - hands must be kept clean at all times and such cleanliness is I believe the most important single factor in breaking the chain of infection or contamination.

The foundation of clean food is PERSONAL HYGIENE.

Hygienic food handling depends on team work and the negligence or indifference of one person may undo the work of many, and every individual engaged in this important industry must co-operate in carrying out the various rules and recommendations even if at first sight they appear meaningless and unnecessary. Personal hygiene means clean habits and a positive attitude of mind which regards cleanliness as a good and desirable state, not only because dirt can cause disease, but because cleanliness is worthwhile in itself.

Ice Cream.

26 samples of ice cream were taken during the year. These were obtained from various distributors. All samples were satisfactory, one sample was placed in Grade II. This sample was still, however, satisfactory and further sampling of this supply showed a constant Grade I ice cream, as tested by the statutory methylene blue test.

A particular point was made of sampling from itinerant ice cream vendors in order that an inspection could also be made of the vehicle and equipment. Contraventions of the Food Hygiene (General) Regulations, 1960, were thus quickly dealt with and, we trust, vendors were kept up to the mark.

Provisional Grades of Ice-Cream.

Previsional Grade	Time taken to reduce methylene blue		
. 1	Fails to reduce in 4 hours		
2	$2\frac{1}{2}$ - 4 hours.		
3	$\frac{1}{2}$ - 2 hours.		
4	0		

Note:- Owing to the numerous factors governing the hygienic quality of ice-cream it is unwise to pay too much attention to the bacteriological results on any single sample. Judgment should be based rather on a series of samples. It is suggested that over a six monthly period, 50 per cent. of a vendor's samples should fall into grade 1, 80 per cent. into Grades 1 or 2, not more than 20 per cent. into Grade 3, and none into Grade 4.

Milk and Dairies.

The responsibilities formerly devolving on Local Authorities in this respect now rest with the Ministry of Agriculture, Fisheries and Food.

Local Authorities are responsible, under the Milk and Dairies (General) Regulations, 1959, for the registration and supervision of distributors and also for Part VII of the above Regulations.

This Part of the Regulations empowers the Medical Officer of Health to take action where milk is known to be infected with disease organisms and also to prohibit persons engaging in the handling of milk who have been notified as sufferers from diseases transmissable by milk.

In 1964 there were 37 milk producers in the area.

Biological samples of milk were taken from producers during the year and submitted for biological examination. All samples were satisfactory and showed no evidence of tubercle bacilli.

11 samples of milk submitted for statutory analysis were all satisfactory.

The following table shows the number of samples of milk which have been examined at the Public Health Laboratory during the year.

Sample	Nc. of	Result		
Submitted for	Samples Submitted.	Satisfactory	Unsatisfactory.	
Methylene Blue Examination.	6	6		
Phosphatase Test.	6	6	-	
Turbidity Test.	5	5	_	
		Negative. ·	Postive.	
Bacillus Tuberculcsis.	42	42	-	
Brucella Abortus.	42	41	1	

As will be seen from the table one sample of milk was positive for brucella abortus. On further investigation it was found that the bulk milk supply was diverted for heat treatment to the satisfaction of the Local Authority and no further action was necessary.

Mobile Shops and Vans.

Whenever possible, a check was made during the year on mobile shops and vans operating in this area. Many vans being based cutside the area coming to do business in the Rural District.

It will be apparent that this type of food vendor can be easily missed and perhaps does not always receive sufficient attention. The legal requirements of the Food Hygiene Regulations are somewhat loose for these <u>premises</u> and it is hoped that new Regulations will be introduced in order to adequately cover and control such food vendors. More pressure will be brought to bear on these people in the future in order to raise the standard of hygiene to a satisfactory level.

A few complaints were received from members of the public regarding these vendors during the year. These complaints were investigated, and, where appropriate, action was taken.

Food Poisoning.

One case of food poisoning was notified during the year - Salmonella Typhimurium being isolated. Investigations showed that the patient, an adult male had attended a family party some considerable distance cutside this Council's jurisdiction and further anquiries substantiated that other members of the patient's family had also been infected. This infection was restricted to the family.

Laboratory Facilities.

Thure has been no change in existing arrangements which satisfactorily meet all needs.

Bacteriological and Biological - The Public Health Laboratory Service,

County Hospital, St. Anne's Road, Lincoln.

Chemical

- E.R.W. Fogden, Esq., B.Sc., F.R.I.C.,
Hamilton Read,
Sherweed,
NOTTINGHAM.

Sampling.

	1964.
Water (Public).	
Chemical.	5
Water (Public Supplies).	
Bacteriological. Satisfactory. Unsatisfactory.	147 142 5
Water (Private Supplies).	
Bacteriological. Satisfactory. Unsatisfactory.	76 24 52
Swimming Pool Waters.	6
Milk Samples.	
Biological. Positive - T.B. Positive - Brucella.	42 - 1
Statutory. Complied. Unsatisfactory.	11 11 -
Ice Cream.	
Grade 1.	25
Grade 2. Grade 3.	1
Grade 4.	-
Ice Lollies.	
Satisfactory. Unsatisfactory.	8 -
Utensil and Equipment Swabs.	15
Hand Swabs (Fccd Handlers).	18
Meat Products.	18
Poultry Hearts and Livers.	7 <u>8</u> 0
Faeces Samples.	13
Shigella Isclated.	1
Liquid Egg.	1
Sewerage Analysis.	4

Legal Action.

No recourse was made to legal action during the year. Such action was envisaged in several cases but in one case the owner chose to close his business before information was laid before the Magistrates and severe warnings appeared to have the necessary effect in the remainder.

Bactericlogical Examination of Utensils, Swabs and Rinsing Waters, etc.

Occasional swabbing of utensils and equipment is carried out by the Department, particularly at the larger food production premises. Generally the swabs were bacteriologically satisfactory. This process can enable the Inspector to demonstrate the very real dangers of contaminated hands and equipment. The usage of chemical bactericides and detergents was also emphasised. It was always pointed out, however, that thorough cleanliness of hands and nails cannot be superceded by bactericides. In this respect, one food handler at a mobile stall did consider that use of a bactericidal hand cream meant absolutely no handwashing - he demonstrated his belief by having no facilities whatever for handwashing. A Laboratory report on the hand cream showed that bactericidal action to be slow acting and of short life. A swabbing of his hands would have been interesting.

Food and Drugs Sampling.

The Kesteven County Council as Food and Drugs Authority are responsible for the sampling of Food and Drugs within the Council's area, and I am indebted to Mr. E.T. Hawley, D.P.A. (Oxon.) the Chief Inspector of Weights and Measures, for the following information regarding this work.

As emphasised in the Annual Report for previous years, in planning the sampling programme for the County he had in mind, two main factors - (a) to give an overall coverage of 3 samples per 1,000 of population annually and (b) to carry this out in a way which gives the greatest benefit to the purchasing public. Thus, since the town of Sleaford is regarded as being essential to the needs of a large proportion of the inhabitants of the rural district, Sleaford U.D.C. is combined with the East Kesteven R.D.C. to give a cognate sampling area with a population of approximately 30,000 for which the target is 90 samples per annum.

During the y ar under review 98 samples were taken in this joint area, the articles sampled being.

Butter	5	Meat pies	7
Cereals	1	Milk	20
Cheese	8	Milk, (condensed)	2
Checolate, drinking	1	Olive cil	1
Coffee	2	Pepper, (paprika)	1
Cream	4	Preserves	6
Drugs	7 .	Prunes	2
Food colour	2	Sauce, (tartare)	1
Fruit, (tinned)	5	Sausages	3
Honey,	2	Soft drinks	5
Ice cream	2	Tinned meats	5
Margarine	2	Vinegar, (malt)	1
Meat paste	1	Wines	2
		TOTAL	98

With the exception of some of the samples of milk and cream, which were tested in the Department's laboratory and found to be genuine, all the above samples were submitted to the Public Analyst for Kesteven, E.R.V. Fogden, Esq., B.Sc., Fellow of the Royal Institute of Chemistry, of Nottingham, whose reports, in the main, were very satisfactory.

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Butter. .

The 5 samples taken in East Kesteven were all satisfactory and contained an average of 15.6% water.

Cream.

The 4 samples of Double Cream were all satisfactory and contained an average of 50.4% butter fat.

Sausages.

The 3 samples obtained locally contained 74% meat @ 3/2d. per 1b; 64.5% meat @ 3/-d. per 1b. and 58% meat @ 2/8d. per 1b and though 2 were below the county average of 68% meat, it will be noted that the average price was 3/2½d. In the circumstances, all, 3 samples purchased locally compare favourably with sausage samples taken elsewhere in the county, but it is the Council's view that no sausage described as a pork sausage should contain less than 65% meat. The manufacturer of the pork sausage containing 58% meat was so informed.

Foreign bodies in food.

It will be seen from my Annual Report that a number of complaints concerning "foreign bodies" in food was investigated during the year, but none arose in the East Kesteven area. While this may be fortuitious, it is nonetheless reassuring, for "foreign body" complaints are a cause of great concern to all food manufacturers and action taken onywhere in the County is likely to have beneficial effects elsewhere.

In the same way, it is quite likely that action taken in Bourne in connection with some imported plastic toys had beneficial repercussions over a much wider area. In this case, some children's tool sets imported from Hong Kong were found to be heavily contaminated with lead, in one instance with as much as 2,500 parts per million by weight. This is a concentration which might prove fatal if the toy were sucked by a young child.

Conclusion.

Shopping facilities in Sleaford and East Kesteven reach a high standard and the demand for good quality food is such that inferior produce is rarely offered. While the village baker has virtually disappeared, the village butcher continues to enhance the reputation of the County for tasty and good quality sausages.

Milk is another staple food which has passed from the village producer-retailer to the large-scale processor-distributor. Untreated milk is still obtainable in East Kesteven, but by far the greater quantity is heat-treated cutside the area and delivered daily from Lincoln or elsewhere. Figures for East Kesteven compare favourably with those for the County as a whole and emphasise, not merely that pasteurised milk is of good quality, but that it maintains a consistency of good quality throughout the year.

In short, it is true to say that work under the Food & Drugs Act, both in East Kesteven and throughout the County, reveals little evidence of adulteration and much that is reassuring to all concerned with the nation's food supplies.

Petroleum Acts Administration.

No. of Petroleum Licences on Register	
at end of 1964.	144
No. of new licences issued during 1964.	12
No. cancelled during 1964.	Nil
No. of gallons of Petroloum Spirit stored.	143,110 galls.

A comprehensive survey and inspection of all installations had been carried out during 1963 and a considerable number of contraventions had been observed principally in connection with lack of warning signs, unsuitable electric wiring, lack of fire extinguishers, sand and unsatisfactory vent pipes. Inspections were carried out during 1964 to ensure that these defects had been remedied and all new installations were inspected on several opposions as the installation work proceeded to ensure compliance with the licence conditions. All new tanks were tested by air pressure to 10 lbs. p.s.i. after the storage tanks had been lowered into the ground and before enclosing in concrete.

The Council are Members of The Association for Petroleum Acts Administration which has new become a National Organisation having its origin in The Midlands Petroleum Acts Administration Group and the Chief Public Health Inspector in his capacity as Petroleum Inspector is the Council's Representative at the Meetings of the Association. These Meetings have proved to be most valuable and the activities of the Association in co-ordinating some degree of conformity in licensing conditions even more so.

Factories Act, 1961.

Fifteen defects were found in factories in this area, two being brought to the attention of the Department by H.M. Inspector of Factories. Compliance with the notices was effected without reccurse to statutory action in all but one case. Section 127 of the Act applies the provisions of Part 1 of the Act with respect to sanitary conveniences to building operations and works of engineering construction as though they were factories and the contractors were occupiers. The Department's Officers pay attention to this requirement when inspecting such sites on other occasions. Seven requests to provide toilet factlities were complied with. The majority of the premises coming within the definition of a factory have been inspected during the year. In one case the Factory Inspector drew the attention of the Council to a case of non-compliance with the Thermal Insulation (Industrial Buildings) Act, 1957. We could nct enferce the provisions of the Act since deposited plans had been approved and the work had been completed in accordance with the plans more than twelve months.

Outworkers Premises.

One notification was received regarding premises used by cutworkers. This was in conjunction with a female worker employed in the manufacture of furniture trimmings. On inspection the premises were found to be satisfactory in all respects.

Factories Act, 1961.

1. Inspection for purposes of provisions as to Health including inspections made by the Public Health Inspectors.

	No. cn Register.	Inspections.	No. of written Notices.	Occupiers Prosecuted.
Factories in which Sections 1, 2, 3, 4 and 6 are to be enforced by Local Authorities.	12	16	4	Nil
Factories not included above in which Section 7 is enforced by the Local Authority.	59	64	8	Nil
Other premises in which Section 7 is enforced by th Local Authority, but not including outworkers premis		30	3	Nil
TOTALS.	93	110	15	

2. Cases in which defects were found.

	Number	of Defects
	Frund	Remedied
Want of Cleanliness (S.1)	2	2
Overcrowding (S.2)	_	_
Unreascnable Temperature (S.3)	_	-
Inadequaté Ventilation (S.4)	-	_
Ineffective drainage of floors (S.6)	_	_
Sanitary Conveniences (S.7)		
Insufficient	7	7
Unsuitable or defective	6	5
Not separate for sexes	-	-
Other offences against the Act, not		
including offences relating to out-work.	-	-
TOTAL.	45	4.4
TOTAL.	15	14
Referred to H.M. Inspector.	Nil.	
Referred by H.M. Inspector.	2	
Number of offences in respect of which		
prosecutions were instituted.	Nil	

Part VIII of the Act - Outworkers.

Nature of work.	Nc. of cut- workers.	No. of clses in which default in send- ing lists	Nc. of prosecutions for failure to supply lists.	Nc. of instances of work in unwhole- some premises.	Notices served and Presecutions.
Curtains		te Council.			

Rag - Flock Act.

furniture hangings.

There are no premises in this Council's Area requiring the attention of your Officers under this Act.

Offices, Shops and Railway Promises Act, 1963.

Another piece of legislation appeared on the statute book during the year, which your Public Health Inspectors were appointed to administer. The main provisions of the above Act came into force in the last quarter of the year. Nationally the Act had been well publicised by radio, press and television and by posters, leaflets and booklets, in fact I cannot recall any other public health legislation receiving such wide publicity before. As the provisions of the Act take effect, it will provide better facilities, increased wellbeing and promote better working conditions among shop and office workers. In this respect a comparison may be drawn between the Factories Acts legislation for factory workers and this Act.

Inspections of registered premises were commenced from the inception of the Act in October, 1964.

Many shops are exempt from this legislation by reason of members of family only being employed or by reason of employees working less hours per meek than the total hours specified for registration (21 hours).

Food premises in the main, largely comply with the various legal requirements since many of the provisions are comparable with those of the Food Hygiene Regulations and various Sections of the Shops Act, 1950 (now repealed by the new Act), especially relating to temperature, ventilation, sanitary conveniences and washing facilities. A major provision which is frequently contravened I feel will prove to be in respect of the standard of lighting including the degree of luminosity and absence of glare, from artificial lighting. This will not be so apparent in the shops proper but more particularly along passages and in storerooms.

The larger offices within the district are generally those attached to factories and the enforcement of this Act then becomes the responsibility of the Fretory Inspector. The smaller offices were found to be generally reasonable with three exceptions and of these three, two of the firms involved took the initiative by submitting plans for improved offices. The other company submitted plans after informal action by the Department.

The total number of applications received for registration at the end of the year under this Act was 61 but there were quite a number still to register and it may be that there are a few other premises such as farm offices etc. which come within the scope of the Act that still have to apply for registration. An attempt will be made to inspect all premises coming under the control of this legislation and Regulations already made and still to be made under same, on at least two occasions during 1965.

In addition to the health, welfare, safety and protection from fire provisions of the Act, the responsible Authority must be notified forthwith of any accident causing the death of an employee, or more than three days disablement from doing his usual work. Where death occurs after notice of disablement is given, notice of the death must immediately be sont to the Authority, and all must be investigated. Explanatory leaflets prepared in the Department were circulated to all those premises likely to be affected by this legislation.

The following table shows the registrations and general inspections effected since the coming into operation of this legislation and the analysis of persons employed:-

Class of Premises	Total No. of Premises Registered at end of Year	No. of Persons employed
Offices.	13	46
Retail Shops.	35	83
Wholesale Shops, Warehouses.	1	5
Catering establishments open to the public, canteens.	7	20
Fuel storage depots.	5	11
Total.	61	165
	Total Males. Total Females.	78 87

Number of inspections made during year in connection with this legislation.

Radicactive Substances Act, 1960.

Sections 1(6) and 8(5) of the above Act provide that the Minister of Housing and Local Government shall send copies of certificates of registration and authorisation issued under the Act to certain Local or Public Authorities.

Certificates of registration under section 1 of the Act have been granted to one user in respect of three premises in the Council's area. All certificates relate to any liquid substance which is radioactive material solely because it contains phosphorus 32 - limitations as to use - agricultural research. Service overalls slightly contaminated with radioactivity are permitted to be sent to R.A.F. laundry on the Cranwell Station and the total amount of radioactivity on all the overalls sent to the laundry in any one month will not exceed 2 millicuries. At this level the monthly average concentration of activity likely to be present in the effluent discharged from the laundry will be extremely small and will present no hazard. The Ministry of Housing and Local Government, therefore, approved the discharge of the effluent to the drainage system.

Smoke Control.

The degree of atmospheric pollution in this area gives little cause for concern. There were no complaints from members of the general public. The Department gave advice on the use of smokeless fuel burning appliances on request. In this respect I would advise householders and builders to fit approved fuel burning appliances wherever practicable. Use of these appliances will reduce aerial contamination. It must be remembered that a build up of localised pelluted atmosphere can occur rapidly in a built up area if the weather conditions are such that dissipation does not occur. Further, prevailing winds carry an appreciable measure of pellution from inland conurbations thrugh this should decrease as smoke control measures in these areas take effect.

Other causes of air pollution include sulpher compounds from cil burning appliances and exhausts from read traffic. With the former, the only recourse is dissipation at a height. In this respect the Department advised on chimney heights and chimney construction for cil burning appliances during the year. It must be remembered that every 10 lbs. of cil burnt yield some 0.6 lbs. of sulphur compounds as air pollutants.

A typical flue gas analysis from an oil burning appliance working at 70% efficiency shows the relatively high percentage of sulphur compounds as sulphates.

Iron Oxide $(\mathbf{Fe}_2\mathbf{O}_3)$ - 28%. Sulphates and sulphites $(\mathbf{SO}_2\mathbf{SO}_3)$ - 30.1% Carbon (\mathbf{C}) - 15.2% Unburnt Oil - 7.2% All other matter - 26.5%

Regarding pollution from road traffic, The Warren Spring Laboratory of the Department of Scientific and Industrial Research stated in a report "smoke concentration can be very high on busy main roads, but such concentrations are very localised". On a stretch of the A1 through a small town within a radius of 200 yards the figures varied from 5 microgrammes/cubic metre in side roads to 50 m.g./c.m. on a wide stretch of the A1 and 200 m.g./c.m. on a narrow congested strip of the road. In comparison, a figure of 900 m.g./c.m. was measured in a busy London Street.

These, of course, are figures for solid pollutants. No regard is paid to invisible noxicus and poisonous gases of which the sulphur compound exhaust gases are only one.

I append below details of atmospheric pollution at Ruskington together with comparative figures for a typical West Midlands Urbanised Area, as obtained from the Bulletin of the Warren Spring Laboratory.

· MONTH.	RUSKINGTON Units-microgrammes/cu.m. Smoke. SO2.		COMPA Units m. Smoke.	
January.	NOT IN O	PERATION	261	133
February.	92	49	206	181
March.	44	33	270	190
April.	29	48	71	106
May.	13	46	38	44
June.	_ 17	32	48	86
July.	17	34	38	44
August.	18	37	36	44
September.	28	35	63	62
October.	80	51	181	204
November.	84	59	229	206
December.	112	76	207	125

Heating Appliances (Fireguards) Act, 1952.

The responsibility for administering the above Act to prohibit the sale or letting of certain heating appliances without an effective fireguard, and regulations made under this Act in 1953, is that of local authorities. Several inspections have been made in connection with this legislation but no infringements of the Regulations were noticed.

Public Vehicles.

No action was necessary during the year in respect of filthy or verminous public vehicles, and as reported in previous years it is pleasing to note that m st operators disinfect their vehicles at regular intervals.

Canal Boats.

No canal boats were registered with this Authority, therefore no action was necessary.

Dangerous or Unsightly Structures.

Three dangerous structures were dealt with and two ruinous or dilapidated buildings seriously detrimental to the amenities of the neighbourheed, under the previsions of the Public Health Acts 1936 and 1961. The dangerous structures were demolished or reconstructed without recourse to statutory action. Formal action was necessary in connection with those detrimental to the amenities of the neighbourhood; demolition was carried out in default but the costs incurred were recovered by agreement without recourse to enforcement procedure.

Hairdressing Establishments.

Several establishments were visited by your Health Officers during the year and advice was given where necessary. We consider that control of these premises should be more adequate by effective legislation. Section 77 of the Public Health Act, 1961, empowers a Local Authority to make byelaws for the purpose of securing:-

- (a) Cleanliness of premises on which a hairdresser's or barber's business is carried on and of the instruments, towels, materials and equipment used, therein, and
- (b) the cleanliness of the hairdressers or barbers working in such premises in regard to both themselves and their clothing.

I am not, however, aware of any model byelaw in this respect prepared by the Minister or of any such byelaw being approved. However, whilst more adequate control is in our opinion necessary we do feel that the craft organisation itself is doing much to improve standards by registration and examination.

Spraying of Becks, etc.

Several dykes, ditches, etc. were flushed during the year.

Filthy and Verminous Premises.

Only one house was disinfested during the year being infested with fleas. It is many years since we last saw a bedbug and apart from the more affluent state of society and natural elimination of poverty the use of modern insecticides has no doubt contributed to this end.

National Assistance Act, 1948.

Several visits were made during the year by the Chief Public Health Inspector sometimes in co-operation with the District Jelfare Officer to persons living under difficult conditions. In no case was it necessary to draw the attention of the Medical Officer of Health to the desirability of enforcing removal to Part III accommodation. Such extreme cases are relatively few but with an ageing population the Department are constantly on the look-out for such tragedies in an attempt to catch them before they reach the stage to which removal to suitable accommodation is necessary. Patience, tact and consideration is essential in dealing with such cases.

Neither was it necessary to arrange for burials under the provisions of Section 50 of the ${\ Act}$, although two such cases were investigated by me.

Disinfections in Case of Disease.

The terminal disinfection of dwellinghcuses etc. where cases of infectious diseases have occurred is not now carried out as a routine measure. In several cases, however, on application, dwellinghcuses have been so disinfected, and from a psychological point of view alone is of some value.

Demestic and Other Pests.

During the warmer months frequent requests were made for advice in dealing with ants, invading dwellinghouses, particularly where land had recently been broken up. In numerous instances, particularly in respect of Council houses, your work-men carried out such control measures as were thought appropriate without charge. Similarly in the case of persistent trouble by wasps, when other measures failed the Department was willing and able to help with these problems. Ants and wasps were the principle offenders. Earwigs, frequently a cause of trouble were no problem this year. The following table shows the work carried out by your Rodent Operators in addition to their normal duties.

PESTS.	TREATMENTS.	MATERIALS USED.
Ants. Bees.	21 2	Insecticides. Insecticides and
Bats.	1	cyanide powder. Gammexane smcke
Beetles.	8	generators. Insecticides.
Flies.	11	Insecticides.
Moles.	25	Strychnine.
Rabbits.	35	Cyanide powder.
Wasps.	50	Insecticides and cyanide powder.

Total number of treatments 153.

The infestation relating to bats was particularly interesting since the roof space of a recently constructed house was heavily infestated and it was obviously desirable not to kill the bats in such a location. Gammexane smoke generators were used to drive them out of the roof space and over 120 bats were counted deserting the said building.

Schools.

Further improvements were carried out so far as the conversion of closet accommodation and the provision of handwashing facilities and adequate drainage was concerned. Regular attention is paid to the cleansing of septic tanks under a contract entered into with the County Education Committee in 1952 and also for the removal of kitchen waste from certain Schools.

Public Conveniences.

Public conveniences are provided by the Council at Martin Village and at Chapel Hill. The responsibility for maintaining and cleansing rests with the Council's Surveyor and I can well appreciate his difficulties in this respect. Some of the people using same no doubt require instruction in personal hygiene, cleanliness, and respect for public property. The conveniences at Chapel Hill are regularly made use of by fishermen resorting to the River Witham. Proposals to construct such facilities at Kirkstead Bridge and Tattershall Bridge were also under consideration.

Agriculture, Safety, Health and Welfare, Provisions Act, 1956.

An Act to provide for securing the safety, health and welfare of persons employed in agriculture and certain other occupations and the avoidance of accidents to children arising out of the use, in connection with agriculture, of machinery or implements and for purposes connected with the matters aforesaid.

The Sanitary Authority are responsible for the enforcement of Sections 3(1) and 5 of this Act, relating to the provision of and cleanliness of sanitary conveniences on farms.

A comprehensive survey made the previous year showed that in general provision was made at the farmsteads for such purpose even if only by the retention of vault type closets redundant to the needs of the household. Gang masters do generally provide some primitive arrangements for casual workers. This is, however, a problem we shall have to give more attention to as the rightful demands and considerations of the farmworker are brought more in thine with his colleagues in industry. We received absolutely no complaints in this connection probably because of the reluctance of the farmworker to make such complaints even though we should treat such representations as confidential.

Burial Grounds.

Difficulties in obtaining suitable land for the disposal of the dead contributes to the need for a Crematorium to serve the area.

No exhumations were carried out during the year.

Swimming Pools.

There are no public swimming pools in the area but there are three private pools which are likely to be used by visitors or guests of the owners. Advice on chlorination, etc. has been given in all cases and occasional checks have been made to determine the efficiency of sterilisation.

Road Safety.

The Council are represented on the East District Road Safety Committee which makes recommendations to the County Sub-Committee on Road Safety matters generally and your Chief Public Health Inspector is the Hon Secretary. This Committee particularly through the activities of the Public Representatives and with the co-operation of Head Teachers has a good record so far as training in cycling proficiency and Tufty Clubs are concerned and considerable publicity is given to Road Safety matters throughout the area.

Home Safety.

There is no active Committee appointed for the Rural District in respect of this important subject and I feel that consideration should be given to the appointment of a voluntary Committee consisting of a cross section of the community to publicise the precautions to be taken in respect of the prevention of accidents in the home. Councillors, Members of the Medical Profession, Representatives of Womens' Organisations, Builders, Architects and Public Health Workers could contribute to the activities of such a Committee.

Nuisances.

Nuisances may either be common law or statutory nuisances. In the former case, the nuisance is one which violates the principles which are laid down by common law for the protection of the public, apart from any express provision of the statutes relating to nuisances. A statutory nuisance on the other hand, is one which, whether or not it constitutes a common law nuisance is defined as a nuisance by statute either in express terms or by implication. The detection of nuisances is an important part of the work of Public Health Inspectors and in spite of the many improvements carried out and action taken by local authorities since nuisances were first dealt with under the Public Health Acts, routine inspections are still necessary and complaints are still received regarding a large variety of conditions which may or may not constitute nuisances within the meaning of the Public Health Acts.

Considerable tact is necessary in investigating such prolems and not infrequently complainants attempt to use the public health staff as a means of "getting at" their neighbours after domestic quarrels, or alternatively suggest that the inspectorate should take action on their behalf in what is obviously their own responsibility. All too frequently the complainants wish to remain anonymous and investigations frequently show that the alleged muisance is not substantiated or alternatively the complainant haw not drawn the attention of the person allegedly causing the muisance to their own discomfort, whether real or imagined. About forty such muisances were dealt with without recourse to formal action, during the year, principally in connection with the storage or disposal or indiscriminate dumping of rubbish, compost or manure, drainage muisances, heusing defects, the keeping of animals or poultry, noise dust or noxious effluvia and polluted watercourses, etc. The keeping of pigs and poultry under modern conditions of environmental control adjacent to residential properties and the storage and making of silage and its transport through villages are occasional muisances, particularly during the summer menths which are increasingly difficult to control.

The Pet Animals Act, 1951, and Animal Boarding Establishments Act, 1963.

There are now only two licensed Boarding Establishments for animals in the district and no pet shops. The 1963 Act provides that no person may keep a Boarding Establishment for animals unless is has been licensed by the Local Authority. From the earliest times both Central and Local Government have concerned themselves with curbing the transmission of disease from animals to man, but the Animal Boarding Establishment Act seems to be the first real effort on the part of local authorities to prevent disease transmission from animal to animal. The Association of Public Inspectors' and the British Veterinary Association have issued a joint memorandum the tenor of which was that the framework of control should be entrusted to the veterinary profession and the Public Health Inspectorate.

Weather.

The following figures show the rainfall and temperatures recorded at Sleaford, and also, in the case of Cranwell, the hours of bright sunshine. This information has been abstracted from the records of the Meteorological Officer, Cranwell, and Messrs. Charles Sharpe and Company Ltd., Sleaford, to whom I am indebted.

SLEAFORD - 1964.

MONTH.	No. of Raindays*	Rainfall (in inches)	Mean monthly Temperature (°F)	9
January. February. March. April. May. June. July. August. September. October. November.	8 12 15 17 11 17 9 8 4 9	0.83 0.92 3.41 1.86 0.67 3.37 0.94 1.61 0.25 0.86 0.92	31.14 40.29 37.58 45.83 55.35 58.08 62.32 56.15 56.15 47.61 45.81	
December.	12	1.01	39·92 48·01	1

CRANVELL - 1964.

TONIMILO	Nc. of:- *		Rainfall	Mean monthly	Sunshine
MONTHS.	Raindays	Wet Days	(in inches)	Temperature (°F)	Hours.
January.	9	7	0.87	36.0	49.8
February.	10	7	0.79	39.0	75.5
March.	15	10	3.30	37.9	54.3
April.	17	10	1.85	47.5	115.8
May.	12	4	0.65	55.6	232.4
June.	18	13	2.76	56.5	128.3
July.	8	8	1.21	61.0	208.8
August.	9	8	1.80	60.3	192.0
September.	7	3	0.28	57.4	193.2
October.	8	7	0.89	47.7	118.7
November.	14	8	1.05	44.4	61.5
December.	13	9	0.97	37.2	60.6
	140	94	16.42	48.4	1490.9

^{*} Rainday - .2 mm. rainfall or more. Net day - 1.0 mm. rainfall or more. Past readings at Cranwell during the period 1921 - 1964 give the following monthly averages. The extremes of temperature and maximum rainfall during this period are also shown. The most concentrated rainfall during any one day during 1964 was 1.36" on 14th March, 1964. The most concentrated rainfall during the period 1955/1964 was 1.71" on 17th May, 1955.

CRANWELL - MEAN R ADINGS 1321 TO 1964.

MONTH.		No. o	f:- Wet Days	Rainfall (in inches)	Mean monthly Temperature (°F)	Sunshine Hours.
January February March. April. May. June. July. August. September October November	er.	17 14 12 13 13 12 13 13 12 14 17	11 9 7 9 8 9 8 9 11 9	2.03 1.61 1.40 1.57 2.06 1.77 2.41 2.16 1.94 2.19 2.45 1.82	38.0 38.5 41.9 46.4 51.7 57.1 61.3 60.7 56.6 49.9 43.1 39.3	53.5 69.7 115.5 151.1 189.2 196.0 192.0 178.0 139.2 106.8 63.9 49.6
		166	; 108	23.41	48.7	1504.5

CRANWELL - EXTREME READINGS 1921 to 1964.

Month.	Temperatur	es (^o F).	Maximum
	Naximum	Minimum	Rainfall (inches)
January. February. March. April. May. June. July. August. September. October. November. December.	58	8	1.035
	63	7	1.01
	72	12	1.36
	77	24	0.92
	87	28	1.78
	91	34	2.02
	91	40	5.14
	92	38	2.05
	86	31	1.35
	77	24	1.73
	66	19	1.16

Average annual rainfall for the British Isles (Standard Period 1881 - 1915 - 41.41 ins.

Average annual rainfall for the British Isles (1870 - 1936) - 42.64 ins.

Average annual rainfall for London - 25.0 ins.

1 inch of rainfall equals $4\frac{3}{4}$ gallons per square yard or \cdot 22,624 gallons (101 tons approx.) per acre.

NOTES.



